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ABSTRACT

Analysis of a form of Burushaski, spoken in northern Pakistan, uses Relational Grammar (RG), targeting grammatical relations at different strata in a clause, to account for a wide range of verb agreement and case marking phenomena. It is found that the RG notions of unaccusative and unergative are sufficient to characterize the two major groupings of intransitive verbs. The nominals that can trigger object agreement on the verb are accounted for by various revaluation constructions. The grammar sanctions inversion, multi-predicate causative constructions, and impersonal constructions with a silent dummy nominal, thus making a similar case for subject agreement. Burushaski particularly lends support for RG claims about antipassive constructions. The RG notion of ascension is sufficient to account for possessor object agreement with verbs that govern this construction. Analyzing clauses with auxiliaries as multi-predicate construction helps account for absence or presence of object agreement in some situations. Causatives and inversion are also seen as multi-predicate constructions. Case marking of certain nominals is often sensitive to grammatical relations within a clause; if a nominal bears a certain relation in a clause, it will receive appropriate marking in spite of other grammatical relations. The rule for ergative case marking is similar. Contains 66 references. (MSE)

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ED 400 695

# Verb Agreement and Case Marking in Burushaski

Stephen R. Willson[1]

*Burushaski verb agreement and case marking phenomena are complex and have not been described adequately by any current theory of syntax. In particular, no explanation has yet been given as to why a variety of nominals can trigger agreement in the verbal prefix. In some cases the apparent subject triggers this agreement, in others the direct object appears to do so, in others the indirect object, in others the possessor of the direct object, in others a benefactive or source nominal. Also, the constraints on the usage of ergative, absolutive and oblique case, and other indicators of grammatical relations on nominals, have been insufficiently characterized in the literature on Burushaski. In this paper I propose an account of these facts, and several others relating to Burushaski clause structure, within the framework of Relational Grammar.*

## 1. Introduction

### *1.1. Background*

Burushaski is a language spoken by about 100,000 people in northern Pakistan. There are two main dialects of the language, one spoken in the Yasin valley (also called Werchikwar), and the other spoken in the Hunza and Nagar valleys. Although there are some differences between the Burushaski spoken in Hunza and Nagar, they are few.[2]

Burushaski is classified as a language isolate. No conclusive studies have yet been done to link it genetically to any of the neighboring language groups, nor to any other language for that matter (e.g. the languages of the Caucasus). These neighboring groups are Indo-Aryan Dardic (represented by Kalasha and Khowar to the west, and Shina to the south), Western Iranian (represented by Waqhi to the north), West Tibetan (represented by Balti to the east), and Turkic (represented by Kirghiz and Uighur further to the north).

This study will focus exclusively on the dialect of Burushaski spoken in central Hunza, specifically the township of Hyderabad. However, most of the rules also apply to Nagar Burushaski, and many apply to the Yasin dialect as well.

### *1.2. History of Burushaski studies*

Burushaski has received a relatively large amount of attention from linguists compared to the surrounding languages of northern Pakistan. This is due in large part to its nature as a language isolate. Much of the work done on the language is summarized in Berger 1985a.

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[1] This article is a slightly revised version of the my 1990 M.A. thesis at the University of North Dakota. I would like to thank the following people for their great help with this article: my friend Kisro Khan from Hunza; my thesis committee chairman Stephen Marlett; the other members of my M.A. committee, Albert Bickford and Desmond Derbyshire; and my supportive wife Sharon Willson.

[2] There are two main differences between Hunza and Nagar Burushaski. One is the presence of more borrowed words from Shina in the Nagar dialect. The other is the difference in the second person singular personal pronoun (ún vs. úm for the Hunza and Nagar dialects respectively) and the form of the copula when showing agreement with "y" class singular nouns (eg. bilá/dilá *it is*). For more extensive treatment of these and other dialect differences, see Berger (forthcoming).

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The first major published presentation of Burushaski data was *The Hunza and Nagyr Handbook* in 1889 by Gottlieb Leitner. The portion of this work that is of interest to the study of Burushaski dialects is a section entitled 'The Traveler's Vade-Macum' where a number of words, phrases, and texts of Hunza and Nagar Burushaski are compared with the neighboring Dardic language Shina. These are the oldest available Burushaski texts.

The next work to be issued was *The Burushaski Language* by D.L.R. Lorimer (1935-38). This has been the standard reference work on Hunza Burushaski. The three volumes consist of a grammar, a collection of texts with translations, and a basic dictionary. The data quality of Lorimer is quite good, although his phonetic transcription is unreliable.

Hermann Berger published his *Das Yasin Burushaski* in 1974, the first major study of the dialect spoken in Yasin. This also includes a grammar sketch, a collection of texts and a basic dictionary. The data quality is good and the transcription is usable for further studies.

A number of journal articles have appeared from the University of Montreal by Yves-Charles Morin, Etienne Tiffou, and others. These studies include a Yasin vocabulary list (Morin et. al. 1979), a study of the influence of Urdu on Yasin Burushaski (Morin and Dagenais 1977), a study of Burushaski morphological constraints (Morin 1976), and works on Burushaski voice onset time (Marchal et. al. 1977), usage and function of ergative case (Tiffou 1977), split ergativity (Tiffou and Morin 1982), and the passive construction (Morin and Tiffou 1988).

Basic studies of Burushaski phonology, plural noun and adjective morphology, and verb inflection have been presented in Morgenstierne et. al. 1945. Further work on Burushaski phonology was done in Toporov 1970. An important study of the relationships between Hunza and Nagar Burushaski is presented in Varma 1941.

Various studies have been undertaken to determine the genetic relationship of Burushaski. Among these are Bouda 1950, Toporov 1971, and Tikkanen 1988 and 1995. None of these studies has produced any conclusive results.

More recently there has been the publication of *Contes du Yasin*, a basic grammar of Yasin Burushaski with an accompanying dictionary (Tiffou and Pesot 1989, Morin and Tiffou 1989), and *Hunza Proverbs*, a collection of proverbs, riddles, and sayings (Tiffou et. al. 1993). Also of note are several books of Burushaski proverbs, riddles, poems, and cultural information by the Hunza scholar Dr. Allaama Nasiruddin Hunzai (Hunzai 1961, 1991a, 1991b). Berger is currently completing work on his three-volume study of Hunza and Nagar Burushaski. This will also consist of a grammar, a collection of texts, and an extensive wordlist.

The research for this paper was conducted during three visits to Hunza in the summers of 1987, 1988 and 1989. My principle language consultant was Kisro Khan of Hyderabad. I also received valuable help from Hussain Ali and members of his family, also of Hyderabad.

### *1.3. Posing the problem*

Two types of grammatical rules that often figure into descriptions of languages are verb agreement rules and case marking rules. These kinds of rules can be stated in a form similar to that given below:

(1) a. The verb agrees with its subject in person and number.

b. Direct objects are marked with accusative case.

At first glance however, the set of rules required to account for Burushaski verb agreement and case marking phenomena in different clause types seems anything but simple or elegant. In

example set (2) are some sentences that typify the most common range of markings one might find in any text.[3]

(2) a. dasín háa le hurúTumo
dasín há-e le hurúT-umo
girl/ABS house,y-OBL in sit-3sf/PAST
*The girl sat in the house.*

b. dasín háa le móyanumo
dasín há-e le mó-yan-umo
girl/ABS house,y-OBL in 3sf-sleep-3sf/PAST
*The girl slept in the house.*

c. hilése dasín muyeétsimi
hilés-e dasín mu-yeéts-imi
boy-ERG girl/ABS 3sf-see-3sm/PAST
*The boy saw the girl.*[4]

d. hilése dasínmo r toofá muúmi
hilés-e dasín-mo r toofá mu-ú-imi
boy-ERG girl-OBLf to gift,x/ABS 3sf-give,x-3sm/PAST
*The boy gave the girl the gift.*

e. hilése dasínmo tsum toofá yánimi
hilés-e dasín-mo tsum toofá i-yán-imi
boy-ERG girl-OBLf from gift,x/ABS i-yán-imi
*The boy took the gift from the girl.*

The unmarked order for clause constituents in Burushaski is Subject-Object-Verb. Every finite verb requires an agreement suffix. The suffix on each of the verbs in (2) above shows agreement with the clause initial nominal - the subject/Agent. In addition, many verbs require an agreement prefix. This is the case for examples (2b-e). This prefix in (2b) shows agreement with the subject/Agent, in (2c) and (2e) with the direct object/ Patient, and in (2d) with the indirect object/Recipient.[5]

Subjects of intransitive clauses are marked with Absolutive (ABS) case as in (2a,b). Subjects of transitive clauses are marked with Ergative (ERG) case as in (2c-e). Direct objects are marked with ABS case as in (2c-e).[6] Objects of postpositions are marked by Oblique (OBL) case. Indirect objects are marked by the postposition r *to* as in example (2d). Sources are marked by the postposition tsum *from* as in example (2e).

From the five sentences presented above we could propose the following rules:

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[3] See section 2.1.1 for a discussion of Burushaski phonology and the orthography used in this paper.

[4] See section 2.3.3 for a discussion of the variance in the agreement prefix forms.

[5] The prefix of yánimi in example (2e) is not apparent, but this is the form of the verb used when the thing taken is a singular noun of the h or "x" class. Gánimi is form used when the thing taken is a "y" class noun. See sectoin 2.2 for discussion of Burushaski noun classes.

[6] The terms 'subject', 'direct object', 'ergative' and 'absolutive' are used here in a pretheoretical sense. These terms will be defined more carefully in the next and succeeding sections.

(3) Verb agreement rules (preliminary version)

a. The verb agrees by means of a suffix with the subject.

b. The verb agrees by means of a prefix with the indirect object if there is one, or if there is none, with the direct object if there is one, or if there is none, with the subject of certain intransitive verbs.

(4) Case marking rules (preliminary version)

a. Absolutives occur in ABS case.

b. Ergatives are marked with ERG case.

c. Indirect objects are followed by the postposition ṛ *to*.

d. Locatives are followed by the postposition le *in, at*.

e. Sources are followed by the postposition tsum *from*.

f. Postpositions require their objects to be in OBL case.

Thus far the only real complexity in the rules is in verb agreement rule (3b). Now we will consider some additional examples.

(5)

| | | | |
|---|---|---|---|
| hilése | dasín | taswíir | móoltirimi |
| hilés-e | dasín | taswíir | móo-ltir-imi |
| boy-ERG | girl/ABS | picture,y/ABS | 3sf-show-3sm/PAST |

*The boy showed the picture to the girl.*

The problem with (5) is the case marking of dasín *girl* which in the English translation is an indirect object, yet is marked by ABS case. If this nominal was an indirect object in Burushaski, the rules in (4) would predict OBL case marking followed by the postposition ṛ.

Now consider example (6) below.

(6)

| | | | | |
|---|---|---|---|---|
| hilése | dasínmo | tsum | pén | mushíirimi |
| hilés-e | dasín-mo | tsum | pén | mu-shíir-imi |
| boy-ERG | girl-OBLf | from | pen,x/ABS | 3sf-snatch-3sm/PAST |

*The boy snatched the pen from the girl.*

The problem with this example is verb agreement. In sentence (2e) above which had a source nominal, prefix agreement was with the direct object. Sentence (6) also has a source nominal but agreement is with the source itself, not the direct object.

Now consider the following additional example.

(7)

| | | | |
|---|---|---|---|
| hilése | dasínmo | r | barénimi |
| hilés-e | dasín-mo | r | barén-imi |
| boy-ERG | girl-OBLf | to | look.at-3sm/PAST |

*The boy observed the girl.*

There are two problems with example (7) for the rules in (3) and (4) above. First, the direct object (at least in the English translation) is followed by the postposition ṛ. Second, the verb has no prefix, while the verb in the roughly equivalent sentence (2c) has a prefix showing agreement with the apparent direct object.

Here is another example to consider.

(8) hilése dasínmo mómiSh móoskartsimi
hilés-e dasín-mo mó-miSh móo-skarts-imi
boy-ERG girl-OBLf 3sf-finger.x/ABS 3sf-cut-3sm/PAST
*The boy cut the girl's finger.*

The problem here is that the verbal prefix shows agreement with the possessor dasín *girl*, not with the head of the direct object constituent mómiSh *her finger* as would be expected.

And another example:

(9) dasín redyó dumóyalumo
dasín redyó d-mó-yal-umo
girl/ABS radio.x/ABS d-3sf-hear-3sf/PAST
*The girl heard the radio.*

Here the problem is that the subject of this apparently transitive clause has ABS case marking and triggers agreement in both the verbal prefix and suffix.

Again, let's look at another example:

(10) dasínmo r hán gitáapan awaáji bilá
dasín-mo r hán gitáap-an awaáji b-ilá
girl-OBLf to one,y book,y-INDEF/ABS need be-3sy/PRES
*The girl needs a book.*

Here the problem is that dasín *girl* is followed by the r postposition which is normally used for indirect objects. Also, the copula b *to be* is showing agreement as if gitáapan *a book* were the subject.

We see from examples (5)-(10) that the relatively simple set of rules given in (3) and (4) would have to be considerably more complicated to account for all the data at hand, at least if we assume that the grammatical relations in the Burushaski clauses closely parallel their English translations. In this paper I will propose and argue for a set of verb agreement and case marking rules, along with analyses for all of the above sentences, using the Relational Grammar (RG) framework. These rules will show that Burushaski has many of the syntactic features found in other languages around the world. They will also lend support to the view that Relational Grammar is a framework in which meaningful linguistic universals can be stated, and in which insightful grammars of individual languages can be constructed.

Although a background in Relational Grammar will be useful in reading this paper, I will not assume that the reader necessarily has such a background. I will provide brief explanatory comments where it will be helpful. The reader is referred to several introductory works on RG (such as Perlmutter 1983a) for more information.[7]

## 2. Preliminaries

### *2.1. Typological characteristics*

Burushaski, though a language isolate, manifests many of the attributes of other South Asian languages (Masica 1976:19-39). Some of these will be briefly discussed in this section.

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[7] Other introductory works on RG include Perlmutter 1980, Perlmutter and Rosen 1984, and the references listed in Dubinski and Rosen 1987.

*2.1.1 Phonology*

Burushaski is typical of other South Asian languages in that it employs retroflex stops and affricates, aspirated stops and affricates, and nasalized vowels (though slightly used). It is similar to the neighboring Dardic languages with its retroflex grooved fricatives and affricates. It differs from the neighboring languages in its use of a voiced palato-velar approximate.

There is no commonly accepted way to write Burushaski. Therefore the orthography used in this paper is a simple working version. Some writers would replace the uppercase letters with their lowercase versions and a dot or accent mark above or below it.

(11)
p voiceless bilabial stop
b voiced bilabial stop

t voiceless alveolar stop
th voiceless aspirated alveolar stop
d voiced alveolar stop

T voiceless retroflex alveolar stop
Th voiceless aspirated retroflex alveolar stop
D voiced retroflex alveolar stop

s voiceless alveolar fricative
z voiced alveolar fricative
sh voiceless palato-alveolar fricative

Sh voiceless retroflex palato-alveolar fricative
f voiceless bilabial affricate[8]

ts voiceless alveolar affricate
tsh voiceless aspirated alveolar affricate

c voiceless palato-alveolar affricate
ch voiceless aspirated palato-alveolar affricate
j voiced palato-alveolar affricate

C voiceless retroflex palato-alveolar affricate
Ch voiceless aspirated retroflex palato-alveolar affricate
J voiced retroflex palato-alveolar affricate

k voiceless velar stop
kh voiceless aspirated velar stop
g voiced velar stop

q voiceless uvular stop
qh voiceless aspirated uvular stop
G voiced uvular stop

h voiceless laryngeal fricative

l voiced lateral approximate

---

[8] Phonemically this is /ph/. The letter "f" is used in borrowed words and the digraph "ph" is used in Burushaski words.

r voiced alveolar flap
R voiced retroflex alveolar flap (phonemically the same as D, only used with words borrowed from Urdu)

m voiced bilabial nasal
n voiced alveolar nasal
N voiced velar nasal

w voiced labio-velar approximate
y voiced palatal approximate
Y voiced palato-velar approximate[9]

When a Burushaski word is used sentence-initially in the text of this paper, the first letter will be capitalized. This is done only to follow convention and is not a claim that the word begins with a retroflex consonant or some other phoneme that is symbolized by a capital letter.[10]

Stress in Burushaski is superficially contrastive, as evidenced in the minimal pairs below:

(12) a. báre vs. baré
*of the valley* *look!*

b. íne vs. iné
*3sh-ERG* *DEM3sh*

Stress is indicated in the transcriptions in this paper.

Burushaski has five vowels: a, e, i, o, and u. Vowels occur in both long and short forms, nasalized and non-nasalized.[11] In this paper long vowels are analyzed as sequences of identical vowels in which either of the vowels can be stressed.[12]

(13) a. múu muú
*her father* *now*

---

[9] The body of the tongue approaches the position midway between the palate and the velum without causing friction, yet comes closer to the roof of the mouth than for a high central vowel.

[10] Burushaski words are only capitalized sentence-initially when used in the text of this paper. The same words, when used in the numbered examples, have the proper phonemic capitalization.

[11] Nasalized vowels in this paper are indicated by a caret (^) above the vowel.

[12] Sequences of non-identical vowels are also common as in the following examples:

(i) a. úe ué
*3p-ERG* *3p/DEM*

b. éi eí
*his daughter* *my son*

c. óuruTas óuwas
*to make them sit* *to not give to them*

A correlate of stress is higher pitch, which is especially noticeable in sequences of identical vowels, the second of which is stressed. For example the root for *name* is ik. This is an inalienably possessed noun and must always be preceded by an agreement prefix. Although superficially contrastive as mentioned above, stress generally occurs on the second syllable of a word. The result when the third person singular masculine agreement prefix i- is attached to ik is iik *his name*, with a noticeably higher pitch in the second vowel. As there are no monosyllabic (single vowel) words that contrast in pitch, a tone analysis for this phenomenon is unlikely.

b. dúun duún
*they having come* *having held*

*2.1.2. Word order*

The basic order of constituents in a clause in Burushaski is SOV. This order is flexible however. For effect, the order of the subject and object in (14) below could be reversed.

(14) ine gús muyeétsimi
in-e gús mu-yeéts-imi
3sh-ERG woman/ABS 3sf-see-3sm/PAST
*He saw the woman.*

Other constituent orderings are:

(15) Modifier - noun[13]
Noun - postposition
Relative pronoun - relative clause
Qualifier - adjective

*2. 2. Noun morphology*

*2.2.1. Noun classes*

There are four noun classes in Burushaski. These are given below followed by the commonly used class designators.[14]

(16) (human) masculine nouns m
(human) feminine nouns f
non-human count nouns x
mass nouns y

These noun classes affect the choice of agreement suffixes on verbs, forms of personal pronouns, suppletive verb roots, plural suffixes, and other aspects of Burushaski morphology. In (17) below, examples are given of the different forms of the agreement suffix for the verb b̲ *to be* for predicate nominals and predicate adjectives of the m, f, "x", "y" singular and "y" plural noun classes. Forms of personal pronouns are also given for anaphors of these classes. Suppletive roots for the verb wáshias *to throw* are also given. The choice of verb root when a clause con-

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[13] Modifiers include adjectives, possessors, demonstrative pronouns, quantifiers, participles and infinitives.

[14] Often rules and morpheme glosses presented in this paper will refer to groups of noun classes. In such cases I will use the following abbreviation conventions:

(ii) h the noun classes m and f (as opposed to "x" and "y")
m the noun class m (as opposed to f, "x" and "y")
f the noun class f (as opposed to m, "x" and "y")
hx the noun classes m, f and "x" (as opposed to "y")
mxy the noun classes m, "x" and "y" (as opposed to f)

The object agreement prefix i̲- (and also the stressed form é̲-) can indicate agreement with an m, "x" or "y" class nominal. In this paper I have only put in the appropriate gloss that is necessary for the reader to see which nominal is being currently cross-referenced. For example, if in a given sentence the agreement prefix is cross-referencing a human masculine nominal, I will gloss it as 3sm, not 3smxy.

tains this verb is determined by the noun class of the direct object. Finally, typical forms of the plural suffix are given for nominals of the various noun classes.[15]

(17)

| | m | f | x | ys | yp |
|---|---|---|---|---|---|
| Agreement suffix | -ai | -o | -i | -ila | -itsaN |
| Personal pronoun | in | in | es | et | ek |
| Verb root | wáshias | wáshias | wáshias | bisháias | gíYas |
| Plural suffix | -tiN | -tiN | -isho/-ants | -iN | -iN |

While the count/mass distinction between "x" and "y" class nouns generally holds (dán *stone* is "x" while tshíl *water* is "y"), there are exceptions.[16] For example, books can be counted in Burushaski (hán gitáap *one book*, altó gitáapiciN *two books*). However, the form of the agreement suffix on the copula when it shows agreement with this noun (hán gitáap b-ilá *it (ys) is one book*) is of the "y" class. The plural suffix that attaches to this noun (-iciN) is of the class that only follows "y" class nouns. The anaphoric pronoun for gitáap is that used for a "y" class noun (ét *3sy*). One verb for *to throw* has three forms. The form used when gitáap is a direct object is bisháias, which is only used when the direct object is a "y" class noun.

These noun classes merge in certain cases. The distinction between m and f disappears in the uninflected third person singular personal pronoun (ín *3smf*), and in all forms of third person plural personal pronouns (ú *3p/ABS*, ú-e *3p-ERG*, ué *DEM3p*). The distinction between the "x" and "y" noun classes disappears in the negative singular form of the verb b *to be* (apí *NEG-be-3sxy*), and the past tense form of manáas *to become* (manímí *become-3smxy/PAST*).

*2.2.2. Noun affixes*

Burushaski is an agglutinative language. It has two numbers, singular and plural, with a variety of plural suffixes that attach to nouns, adjectives, and nominalized verbs.

Definiteness of nominals is unmarked, while indefiniteness is marked by the indefinite singular suffix -an and the indefinite plural suffix -ik.

Burushaski has three cases: ergative, absolutive, and oblique. Ergative case is marked by the suffix -e. Absolutive case is unmarked. Oblique case is marked by the suffix -e for non-feminine (m, "x" and "y") nouns and -mo for feminine nouns.[17]

Ergative case is used for subjects of transitive clauses in all verb tenses except future tense. In clauses with a verb in future tense, the subject usually occurs in absolutive case. Absolutive case is typically used for subjects of intransitive clauses, and for direct objects. Oblique case (without a following postposition) is used for possessors.[18]

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[15] The number of plural suffixes in Burushaski is rather large (Lorimer lists over 60, although he includes a large number of allomorphs) and nouns, adjectives and nominalized verbs are subcategorized as to which plural suffixes they allow or require. The examples presented here are the more commonly used forms.

[16] The more common of these include há *house*, tóm *tree*, and gitáap *book* which are countable, yet "y" class nouns, and zamíin *land* which is an "x" class noun.

[17] The feminine oblique suffix -mo is also used for another purpose which is discussed in footnote 37.

[18] To define the terms 'subject', 'direct object', 'ergative' and 'absolutive' more carefully, I use the two concepts that are central to RG: the notion of primitive (undefined) grammatical relations that a nominal bears in a clause (such as 'subject of', 'direct object of' and others), and multiple levels at which a nominal may bear these relations. A monostratal clause has only one level (or stratum) at which nominals bear grammatical relations. A multi-stratal clause has more than one level. Typically in a given level in a

All grammatical relations except subject, direct object, and possessor are marked by postpositions. Some postpositions in Burushaski (such as r *to*, tsum *from* and le *with*[19]) are not phonologically independent words, while others (such as dalbáT *across* and yaar *under*) are. Sequences of postpositions also occur, as in (18).

(18) inmo tsum yar
3sh/OBLf from before
*before her*

Postpositions govern the case of their objects (i.e. the nominal they follow), usually requiring it to be in oblique case and sometimes in absolutive case. Some postpositions such as ulo *in* require their objects to be marked with oblique case if feminine and absolutive case otherwise.

Many nouns representing body parts and kinship terms are inalienably possessed and require a prefix indicating the possessor. These prefixes are identical to the object agreement prefixes used on verbs. Some examples are given below.

(19) a. yuúTis
i-úTis
3sm-head
*his head*

b. múu
mu-u
3sf-father
*her father*

c. áNgo
a-Ngo
1s-paternal.uncle
*my paternal uncle*

---

clause, one nominal bears the 'predicate' relation, another bears the 'subject' relation and so on. Nominals that bear these relations head 'arcs', with the 'tail' of these arcs being the clause itself. In a multi-stratal clause, a nominal may head more than one arc.

An arc can be referred to by the grammatical relation that the nominal heading it bears in a given stratum. An arc is labeled 'ergative' if the nominal that heads it bears the subject relation in a transitive stratum. An arc is labeled 'absolutive' if the nominal that heads it bears either the direct object relation in a transitive stratum, or the subject relation in an intransitive stratum.

In this paper I will most often use tabular diagrams such as the following to illustrate clause structure.

(iii)

| 2 | 1 | P |
|---|---|---|
| 1 | Cho | P |
| shishámuts | inmo tsum | táq umánie |
| windows | by her | they became smashed |

Shishámuts *windows* heads two arcs in (iii), an 'initial' 2 arc and a 'final' 1 arc, both of which are absolutive. The pronoun in *her* also heads two arcs, an initial 1 arc (which is ergative) and a final Cho arc (which is neither ergative nor absolutive but is a 'retirement' arc). The verb in this simplified table heads both an initial and final Predicate (P) arc.

[19] For the sake of clarity, these postpositions are written in this paper as separate words. Normally they are joined to the word they follow.

*2.3. Verb morphology*

There are two major groups of verbs in Burushaski: inflectible verbs and uninflectible verbs. Inflectible verbs minimally require an agreement/tense suffix, and allow or require other affixes depending on the subcategorization of the verb. Uninflectible verbs never allow an agreement suffix or any other affix; but they require an auxiliary verb, which is usually étas *to do* or manáas *to become*. The syntax of uninflectible verbs is discussed in section 6. The discussion of verb morphology that follows refers only to inflectible verbs.

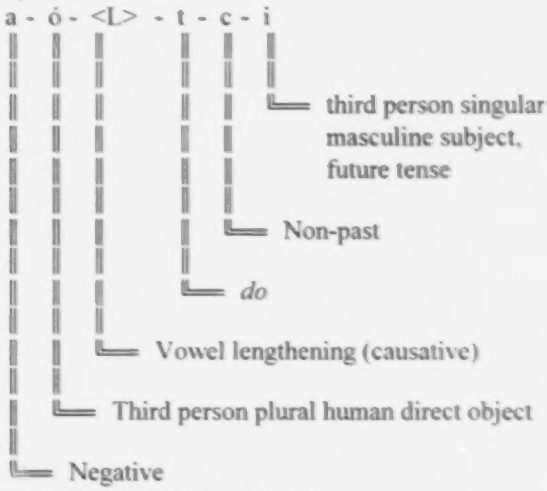
Finite (or tensed) verbs are usually described as occurring in either a past stem form or a present stem form.[20] Phonologically, the present stem is derived from the past stem by the suffixation of -c to the root. Without the -c suffix, the past, present perfect, and past perfect tenses are formed. With the -c suffix, the present, future, and imperfect tenses are formed. Because of the tenses that are formed by its presence, I gloss this -c suffix as NONPAST in this paper, although it can perhaps be thought of as a durative aspect morpheme.

A finite verb consists minimally of a stem followed by a person agreement/tense suffix. The verb girátimi *he danced* is a good example.

(20) girátimi
girat-imi
dance-3sm/PAST
*He danced.*

However, a verb can convey a good deal more information than just this. The example below has five affixes and is not at all unusual.

(21) ayóoci


a - ó - <L> - t - c - i
third person singular masculine subject, future tense
Non-past
do
Vowel lengthening (causative)
Third person plural human direct object
Negative

*He will not make them do (it).*

In the following presentation, I will only mention those verbal morphemes that have not been discussed thus far.

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[20] Nonfinite verb forms include the infinitive, several kinds of participles, verbs with postpositions, and vocative, optative and subjunctive forms. These verb forms are not discussed in this paper.

*2.3.1 The Negative prefix*

The left-most prefix in a verb is the negative morpheme. The negative prefix has two major allomorphs: a- and oó-.[21] The latter is limited to a few verbs.

(22) a. jé JúCam — *I will come*
jé aCúCam — *I will not come.*

b. jé gutshárcam — *I will walk*
jé akútsarcam — *I will not walk.*

c. sabáq pháSh meimi — *The lesson will end*
sabáq pháSh oómaimi — *The lesson will not end.*

d. jé nícam — *I will go*
jé oónicam — *I will not go.*

e. jé bésan séyam — *I will say something*
jé bésan oósayam — *I will not say anything.*

*2.3.2. The "d-" prefix*

The next morpheme which may occur in a verb is the "d-" prefix. There is a subset of verbs which all begin with d-. They include the following verbs presented in example set (23) below.

(23) a. dítsas — *to bring*
b. dématalas — *to yawn*
c. désilas — *to soak*
d. díGunas — *to ripen*

Berger, in his study (forthcoming), has found four usages for the d- prefix: to change the 'primary transitive' into an intransitive (ikhácias *enclose* vs. dukhácias *be enclosed* -- see section 4); to derive a verb with more of a focus on the location of the topic (éeras *to send* vs. déeras *to send here*); to derive a word with no change of meaning from one without the d- (sókas *dismount* vs. dusókas *dismount*); and on certain verbs with no derivational relation to any other verb (dítsas *bring, x* and dítalas *wake up*).

*2.3.3. The object agreement prefix*

Under conditions specified by the syntax, (see following sections), a verb may carry an object agreement prefix. This prefix shows agreement with one nominal in the sentence in person, number, and noun class. It takes basically one of two forms: unstressed or stressed.[22] Sets of these prefixes are presented in (24).[23]

---

[21] Another apparent form, eé-, appears when the negative prefix a- joins the 3smxy agreement prefix i-, as in iwálas *for him to fall* and eéwalas *for him not to fall*. Eé- is not a separate prefix though.

[22] The unstressed/stressed distinction has many exceptions, however, which will not be discussed in this paper.

[23] Berger (forthcoming) lists a third type of prefix, taken from the stressed set in (24) but with a long vowel. Since these prefixes are used mainly in causative, possessor ascension, impersonal or antipassive constructions, I am analyzing them as a simple stressed prefix plus a causative (etc.) morpheme which is represented as <L>, or lengthening.

Burushaski has a rule of vowel epenthesis which inserts a vowel between the d- prefix and the initial consonant of the agreement prefix if there is one. The shape of the vowel is determined by the vowel in the

(24) Prefix agreement types

| | Unstressed | | Stressed | |
|---|---|---|---|---|
| | Sg | Pl | Sg | Pl |
| 1 | a | mi | á | mé |
| 2 | gu | ma | gó | má |
| 3hm | i | u | é | ó |
| 3hf | mu | u | mó | ó |
| 3x | i | u | é | ó |
| 3y | i | i | é | é |

Some verbs prohibit an object agreement prefix (sénas *to say*, daldínas *to sift*) altogether. Other verbs allow a prefix when agreeing with h or "x" class nominals, but prohibit one for "y" class nominals (iltánas/tanáas *to pound x/y*, and iphúsas/pusáas *to bind up x/xy*). Note from the chart in (24) that there is no singular/plural distinction for agreement with "y" class nouns.

The verb manáas *to become* optionally allows an agreement prefix for human and "x" class nominals (under conditions discussed in section 6) and never allows a prefix for "y" class nominals, whether singular or plural.

(25) a. sá lálam imánibim
sá lálam i-man'-ibim
sun,x/ABS shine 3sx-become-3sx/PSTPRF
*The sun had shone.*

b. GéniSh lálam manílum
GéniSh lálam man'-ilum
gold,y/ABS shine become-3sy/PSTPRF
*The gold had glittered.*

The matter of which nominals determine agreement in this prefix will figure in the arguments presented later in this paper.

*2.3.4. The causative/possessor prefix*

A certain class of intransitive verbs can occur with the causative prefix s-.[24] A stressed object agreement prefix always precedes this causative prefix. An example is given below.

(26) a. ín ikháranimi
ín i-kháran-imi
3sh/ABS 3sm-late-3sm/PAST
*He was late*

b. jáa ín éskaranam
jé-e ín é-s-kharan-am
1s-ERG 3sh/ABS 3sm-CAUS-late-1s/PAST
*I made him late.*

---

prefix, following principles of vowel harmony that operate elsewhere in the language. For example, d-gó- becomes dukó-, d-má- becomes damá-, d-mó- becomes dumó-, and d-mé- becomes dimé-.

[24] This sort of process has been noted in other languages. See Andrews 1985:146 for discussion of Yidjin and Dyirbal.

A second causative prefix which consists of a null morpheme (Ø-) is used for another class of intransitive verbs. There is a third causative morpheme which consists of vowel lengthening in the object agreement prefix. This is the form found in example (21) above. Most transitive verbs can be causativized with this morpheme.[25]

A lengthened vowel in this position alternatively indicates agreement with a possessor nominal in the sentence. Possessor agreement is discussed in section 7, causatives in section 8.

*2.3.5. The verb root*

Verb roots occur in a variety of forms.[26] Several verbs without d- have suppletive forms; the choice of which form is used depends on the noun class of the subject (if the clause is intransitive) or direct object (if the clause is transitive). There is one form which begins with b when agreement is with a "y" class nominal and allows no agreement prefix. There is another form which usually begins with w or y when agreement is with a human and "x" class nominal that takes the normal set of agreement prefixes. Some examples follow.

(27) a.
| | |
|---|---|
| bélas | put it (ys) on |
| yoólas | put it (xs) on |
| uyoólas | put them (xp) on |

b.
| | |
|---|---|
| búas | (ys) become dry |
| buyáyas | (yp) become dry[27] |
| yuúYas | (hxs) become dry |
| uúYas | (hxp) become dry |

---

[25] With some verbs, this causative prefix is not always a long vowel. Normally barénas *to look* never allows an agreement prefix. In the causative form, an object agreement prefix with a short (rather than long) vowel is added to form ébarenas. The causative form of baráas *to thresh* is ébaras *to make thresh.*

[26] All verbs have a root except the past stem form of the verb *to come*, which consists of a null root (alternatively analyzed as lengthening of the agreement prefix). This verb has the d- prefix followed by an agreement prefix followed by an agreement suffix with no intervening root. Some examples in the simple past tense are presented in (iv) below.

(iv) a. daáyam
d-a-Ø-am
d-1s-come/PAST-1s/PAST
*I came.*

b. dukóoma
d-gó-Ø-uma
d-2s-come/PAST-2s/PAST
*You (sg) came.*

c. díimi
d-í-Ø-imi
d-3sm-come/PAST-3sm/PAST
*He came.*

[27] The singular/plural difference between búas/ buyáyas *sg/pl become dry* is the pattern also found with gáartsas/garcáyas *sg/pl run*; it is not confined to "y" class arguments. This root allows a seldom used plural infix.

c. wáshias throw (hx)
bisháyas throw (ys)
gíYas throw (yp)

Here is a short list of typical verb roots:

(28)

| | Verb root | Gloss |
|---|---|---|
| a. | ir | *die* |
| b. | u | *give, x* |
| c. | chi | *give, ys* |
| d. | gaarts | *run* |
| e. | guchai | *lie down* |
| f. | huruT | *sit* |
| g. | Gar' | *speak/curse*[28] |
| h. | gaTamur | *knead* |

*2.3.6. The agreement/tense suffix*

Every finite verb has a suffix that typically shows agreement with the subject of the clause; this suffix also indicates the tense of the verb. A typical range of agreement/tense suffixes for the third person present tense is given below.[29]

(29)

| | |
|---|---|
| 3sm/PRES | -ai |
| 3sf/PRES | -ubo |
| 3ph/PRES | -aan |
| 3sx/PRES | -ibi |
| 3px/PRES | -ien |
| 3sy/PRES | -ila |
| 3py/PRES | -itsaN |

*2.3.7. Summary*

I summarize this section on verb morphology with the following chart illustrating the various components of a finite verb and their relative positions in the word.[30]

(30)

| -3 | -2 | -1 | Ø | 1 | 2 |
|---|---|---|---|---|---|
| NEG | Obj Agr | CAUS/POSS | Root | NONPAST | Subj Agr |

**3. Monostratal Clauses**

*3.1. Introduction*

Five basic types of clauses have been identified through work done in Relational Grammar (Perlmutter 1984:6). These types are: monostratal clauses, clauses involving revaluations (advancements and retreats), clauses with ascensions (raising and possessor ascension), clause

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[28] There is a subset of verbs in Burushaski called hypotactic verbs. When these verbs occur without any prefix, word stress falls on the syllable following the root, e.g. manáas *to become*, mináas *to drink*, gaTáas *to bite*. Hypotactic roots are written in this paper with an apostrophe following.

[29] These suffixes can be analyzed even further to include a number suffix and a person/class suffix, but the morpheme glosses in this paper will not be given in such detail.

[30] In most Burushaski texts a word-final question suffix, -a, is included. This can also be analyzed as a separate word.

union clauses, and clauses with dummies. Burushaski has clauses which belong to all five of these categories.

Often in languages, various clausal constructions will be either possible or impossible depending upon the class of verb used. In some cases a construction is disallowed for all verbs. This is the case for the passive construction in many languages of Papua New Guinea (Li and Lang 1978). In other cases a clausal construction may be optional for most verbs but not all. English passives belong to this category. Most English verbs can be passivized but there a few ('want', 'like') which can only be passivized under strictly constrained conditions. In still other cases a construction may be optional and lexically restricted to a small subset of verbs. Antipassive in Choctaw is an example of this. The verbs banna *want/need* and yimmi *believe* occur in both ordinary transitive clauses (with nominative/accusative marking on subjects and direct objects) and in 'double accusative' clauses (with both the subject and the direct object marked accusative). Davies (1986:64-85) analyzes these latter clauses as antipassive constructions.[31] This one set of verbs can be used optionally in either monostratal transitive clauses or in antipassive clauses. Finally a given construction may be obligatory for a small set of verbs. 3-2 advancement in Seri is an example of this (Marlett 1981:288-298).

Although Burushaski has examples of each of the five main clausal constructions presented above, frequently they are obligatory and governed by a small set of verbs for that particular clause type. In this section I discuss Burushaski monostratal clauses and present a set of verb agreement and case marking rules to account for the relevant data. In section 4, I discuss one kind of revaluation construction; advancements. In section 5, I discuss the other kind of revaluation; retreats (or demotions). In section 6, I discuss multi-predicate constructions, or what have been analyzed traditionally in RG as clause union constructions. In section 7, I present the one form of ascension construction used in Burushaski, possessor ascension. In section 8, I present several types of causative clauses and in section 9, I give an analysis of some impersonal clauses involving dummies.

*3.2. Monostratal clauses and basic morphology*

A large number of clauses in Burushaski are monostratal. Example (31) is a monostratal intransitive clause with its associated stratal chart showing the grammatical relations of each clausal constituent.

(31)

| | | | | |
|---|---|---|---|---|
| dasín | múue | háa | le | hurúTumo |
| dasín | mú-u-e | há-e | le | hurúT-umo |
| girl/ABS | 3sf-father-OBL | house,y-OBL | in | sit-3sf/PAST |

*The girl sat in her father's house.*

| 1 | LOC | P |
|---|---|---|
| dasín | múue háa le | hurúTumo |
| girl | in her father's house | she sat |

Dasín *girl* is the only subject and triggers subject agreement in the verbal suffix. This nominal is also an absolutive and is marked with ABS case. There is no object to trigger object agreement. Múu *her father* is the possessor and is in oblique case. Há *house* is also in oblique case since it is the object of the postposition le *in*.

Example (32) illustrates a monostratal transitive clause.

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[31] Antipassive in Relational Grammar terms is the name given to a construction in which a nominal that bears the 1 relation in a transitive stratum bears the 2 relation in a succeeding intransitive stratum.

(32) hilése dasín muyeétsimi
hilés-e dasín mu-yeéts-imi
boy-ERG girl/ABS 3sf-see-3sm/PAST
*The boy saw the girl.*

| 1 | 2 | P |
|---|---|---|
| hilése | dasín | muyeétsimi |
| boy | girl | he saw her |

Hilés *boy* is the subject and triggers subject agreement on the verb. It is also an ergative and is marked with ERG case. Dasín *girl* is the direct object and triggers object agreement (the prefix mu-). Dasín *girl* is also an absolutive and occurs in the ABS case.

As noted in Tiffou and Morin 1982, in the future tense, the subject of a transitive clause such as that in (32) above is not marked with ERG case but rather occurs in ABS case.[32] For example:

(33) hilés dasín muyeéshi
hilés dasín mu-yeéts-c-i
boy/ABS girl/ABS 3sf-see-NONPAST-3sm/FUT
*The boy will see the girl.*

All other case marking and agreement phenomena remain the same for future tense transitive clauses except for the ABS case of the agent. In addition, verbs which can be passivized, causativized or undergo some other grammatical relation changing construction in non-future tenses retain these characteristics when in the future tense. For these reasons I analyze future tense transitive sentences such as (33) as simple monostratal clauses. Burushaski has a quirk in its ERG case marking rule that blocks ERG case in future tense clauses.

Example (34) illustrates a monostratal ditransitive clause.

(34) hilése dasínmo r toofámuts píish ótimi
hilés-e dasín-mo r toofá-muts píish o-t-imi
boy-ERG girl-OBLf to gift,x-PL/ABS present 3px-do-3sm/PAST
*The boy presented gifts to the girl.*

| 1 | 3 | 2 | P |
|---|---|---|---|
| hilése | dasínmo r | toofámuts | píish ótimi |
| boy | to the girl | gifts | he-presented-them |

Hilés *boy* is the subject. It is marked with ERG case and triggers subject agreement on the verb.[33] Dasín *girl* is the indirect object and is followed by the postposition r. Toofámuts *gifts* is the direct object, occurs in ABS case, and triggers object agreement.

---

[32] There are exceptions to this tendency however. The following example is grammatical only if the subject is in ERG case:

(v) úne (*ún) maasúum qáum ké ósqaima?
un-e maasuum qaum ke o-sqan-c-uma
2s-ERG innocent nation,x also 3ph-kill-NONPAST-2s/FUT
*Will you also kill the innocent nation?*

[33] For the time being I will ignore the actual structure of the uninflectible verb plus auxiliary predicate. This will be discussed in section 6.

Example (35) shows a transitive clause with a source nominal.

| (35) | hilése | dasínmo | tsum | toofá | yánimi |
|---|---|---|---|---|---|
| | hilés-e | dasín-mo | tsum | toofá | i-yán-imi |
| | boy-ERG | girl-OBLf | from | gift,x/ABS | 3sx-take,x-3sm/PAST |
| | *The boy took the gift from the girl* | | | | |

In this example hilés *boy* is the subject, is marked with ERG case, and triggers verb agreement in the verbal suffix. Dasín *girl* is the source and is followed by the postposition tsum. Toofá *gift* is the direct object, occurs in ABS case, and triggers object agreement (see footnote).

Finally (36) is an example of a reflexive clause.

| (36) | khín | dasíne | mukhár | ésqanumo |
|---|---|---|---|---|
| | khín | dasín-e | mu-khár | e-sqan-umo |
| | DEMf.prx | girl-ERG | 3sf-self,y/ABS | 3sy-kill-3sf/PAST |
| | *This girl killed herself.* | | | |

I analyze reflexive clauses in Burushaski as being monostratal. Here the subject khín dasín *this girl* is in ERG case and the direct object mukhár *herself* is in ABS case. The reflexive pronoun khár *self* is similar to the class of inalienably possessed nouns; it requires a possessive prefix. In this case the prefix cross-references the antecedent khín dasín *this girl*. Subject agreement is with khín dasín and object agreement is with the "y" class reflexive pronoun khár.

Based on the data presented thus far on monostratal clauses in Burushaski, the following tentative rules can be proposed.

(37) Verb agreement rules (working version a)

a. The verb agrees with nuclear terms.[34]

b. A nominal heading a 1 arc determines subject agreement.

c. A nominal heading a 2 arc determines object agreement.

(38) Case marking rules (working version a)

a. A nominal which heads a 3 arc is flagged with the postposition r.[35]

b. A nominal which heads a Source arc is flagged with the postposition tsum.

c. A nominal which heads a POSS arc is marked with OBL case.[36]

d. A nominal which is an ergative in a non-future tense clause is marked with ERG case.

---

[34] In Relational Grammar, a 'nuclear term' is a 1 or a 2. An 'object' is a 2 or a 3. 1s, 2s and 3s are referred to as 'term' relations.

[35] Case marking rules (4d,f) from section 1 would also need to be added to this list which refer to Locatives being flagged by the postposition le (or ulo) and postpositions requiring their objects to be marked with OBL case etc. Since these rules are not central to the arguments of this paper, I will omit them in most of the statements of case marking rules that follow.

[36] I am assuming that possessors head POSS arcs in an NP. Rosen (1987) has proposed that possessors head 1-arcs within an NP, a proposal that I am not able to comment on at this time.

Note that there could also be a fifth case marking rule stating that nominals heading absolutive arcs occur in ABS case. However, since ABS case marking is null, or no marking at all, I will omit reference to ABS case in any further statements of rules.

**4. Advancements**

A 'revaluation' is a clausal construction in which a nominal heads arcs with distinct grammatical relations at successive levels (Perlmutter and Postal 1984a:84). There are two types of revaluation constructions, advancements and retreats. Both are used in Burushaski. In this section I will discuss advancements and in the next I will discuss retreats.

Grammatical relations in RG are arranged in the relational hierarchy 1 > 2 > 3 > nonterms. An advancement is any grammatical construction in which a nominal bears a certain grammatical relation at one level and bears the next higher grammatical relation in the hierarchy in the succeeding level. A common advancement construction is passive, in which a nominal bearing the 2 relation in a transitive stratum bears the 1 relation in the succeeding intransitive stratum (Perlmutter and Postal 1983a:18). Burushaski allows five types of advancements: unaccusative advancement, passive, Source-2 advancement, 3-2 advancement and Benefactive-3 advancement.

*4.1. Unaccusative advancement*

The examples in (39) and (40) show one property which divides all Burushaski intransitive verbs into two large classes, those which have an object agreement prefix and those which do not.

(39) a. jáa áu háa tsum duúsimi
jé-e á-u há-e tsum duús-imi
1s-OBL 1s-father/ABS house,y-OBL from come.out-3sm/PAST
*My father came out of the house.*

b. síruf hirí giráshaan akhóle
síruf hir-i girát-c-aan akhóle
only man-PL/ABS dance-NONPAST-3ph/PRES here
*Only men dance here.*

(40) a. tshórdimo hilés dítalimi
tshórdin-mo hilés d-í-tal-imi
morning-in boy/ABS d-3sm-wake.up-3sm/PAST
*The boy woke up in the morning.*[37]

b. acaanák hilés iírimi
acaanák hilés i-ír-imi
suddenly boy/ABS 3sm-die-3sm/PAST
*Suddenly the boy died.*

Examples (39a) and (39b) invite a straightforward analysis. Jáa áu *my father* and hirí *men* are intransitive subjects, occur in ABS case, and trigger subject agreement in the verb. The examples in (40) are not so clear. Hilés *boy* in both sentences is the subject, occurs in ABS case,

[37] The suffix -mo on the word tshórdin has the meaning of *in* or *during* or *at* and is used on 'time' words such as tshórdimo *in the morning*, saásaTumo *in the evening*, garúkimo *during springtime*, khúultomo *today*, varkamaásmo *at first*, and the like. It is similar to the feminine oblique case ending except for the fact that all the nouns it attaches to are of the "y" class. The prefix d- on the verb dítalimi is the d- prefix mentioned in section 2.

and triggers subject agreement. But hilés also triggers object agreement in these examples, as is evidenced by the prefix i- *3sm* on the verbs. The question we must ask is "Why is the apparent subject of some intransitive clauses triggering both subject and object agreement in the verb?" The possibility that the examples in (40) are simple reflexive constructions seems unlikely, given both their meaning and the existence of clear cases of reflexives like example (36) in the preceding section, in which a reflexive pronoun is used. Also, if (40a,b) were reflexives, it is odd that there are no transitive forms of these verbs.[38]

The RG notions of 'unergative' and 'unaccusative' help in the analysis of these types of clauses. Intransitive verbs cross-linguistically divide into two groups, 'unaccusative' and 'unergative' (Perlmutter and Postal 1984a:94ff, Rosen 1984:42). An unaccusative verb requires an initial stratum in which the nominal bears the 2 relation and no nominal bears the 1 relation. An unergative verb requires an initial stratum in which a nominal bears the 1 relation and no nominal bears the 2 relation. Often, grammatical rules are sensitive to this division. For example, in Italian the selection of the perfect auxiliary is determined by the type of intransitive verb used (Perlmutter 1978, Perlmutter 1980, Rosen 1981).

Unergative verbs usually involve action or volition, while unaccusative verbs usually are stative or nonvolitional. There are some well-known exceptions to the active/stative division, as discussed in Rosen 1984, but it holds as a strong universal tendency.

In a clause with an unaccusative stratum, at some succeeding level the 2 often advances to 1 in order to satisfy the Final 1 Law (Perlmutter and Postal 1983c). This is called 'unaccusative advancement'. Clauses with unaccusative verbs are (at least) bistratal, while those with unergative verbs are often monostratal.

With these notions in mind we are able to analyze the examples in (39) and (40). The sentences in (39) contain an initial unergative stratum while those in (40) contain an initial unaccusative stratum. Stratal charts of the (a) examples in each set are given below.

(41) a.

| 1 | Source | P |
|---|---|---|
| jáa áu | háa tsum | duúsimi |
| my father | from the house | he went out |

b.

| 2 | Tem | P |
|---|---|---|
| 1 | Tem | P |
| hilés | tshórdimo | dítalimi |
| boy | in morning | he woke up |

In example (41a) jáa áu *my father* is only a 1 so it triggers subject agreement only. In example (41b) however, hilés *boy* is both a 2 and a 1 (due to unaccusative advancement). Since the verb agreement rules proposed in (37b,c) do not refer to levels, but to nominals heading 1 and 2 arcs at any level, hilés triggers both subject and object agreement.

---

[38] Dítalas *to wake up* is a member of the class of intransitive verbs which have derived causative forms with the causative prefix s-. The causative of dítalas is déstalas *to wake him up* which in turn can be causativized with the <L> (lengthening) causative morpheme to form déestalas *to make him wake someone up*. However, dítalas itself cannot ever be used in a transitive clause, as can, for example, ésqanas *to kill* in example (36) of the preceding section.

Íiras *to die* can never be used in a transitive clause, and it has no derived causative form. See section 8 for more on causatives in Burushaski.

Representative lists of Burushaski unergative and unaccusative verbs are given in (42).[39]

(42) a. baltánas - *to pout, be discontented*
duúsas - *to come/go out, emerge, depart*
gáartsas - *to run*
girátas - *to dance*
gutsháras - *to walk*
Garáas - *to curse, talk (badly)*
héras - *to cry*
nías - *to go*
sókas - *to descend*
tshindáas - *to lean on*

b. dématalas - *to yawn*
dépirkanas - *to stumble*
dikhíras - *to become less, be reduced*
dítalas - *to awaken*
iGásas - *to rot, go bad*
iíras - *to die*
imálas - *to feel shame, be discreet*
imánas - *to become*
iwáalas - *to be lost*
iwáras - *to become tired*
yuúYas - *to become dry/thirsty*

The correlation of the presence of the agreement prefix with nonvolitionality, and its absence with volitionality is not absolute, however. Muwálas (wálas *to fall* with the feminine prefix mu-) is the form used for the translation of both English sentences in (43), even though (43b) is volitional.

(43) a. Marcia fell from the second story window.
b. Marcia fell right on cue.

While many verbs appear in only one class, others may be either unaccusative or unergative, with corresponding differences in meaning. Unergative syntax correlates with volitionality and unaccusative syntax correlates with nonvolitionality. The volitional sentence in (44a) is monostratal. The nonvolitional sentence in (44b) is bistratal.

(44) a. sabúur jé tshíl ulo Gurtsám
sabúur jé tshíl ulo Gurts'-am
yesterday 1s/ABS water,y/ABS in become.sunken-1s/PAST
*Yesterday I dived into the water.*

b. sabúur jé tshíl ulo aGúrtsam
sabúur jé tshíl ulo a-Gurts'-am
yesterday 1s/ABS water,y/ABS in 1s-become.sunken-1s/PAST
*Yesterday I drowned in the water.*

[39] Although the words presented here and their English glosses are in the infinitive form, the Burushaski words in (42b) are given with third person singular masculine object agreement prefixes.

*4.2. Passive*

In Relational Grammar a passive construction is characterized universally as one in which a nominal bearing the 2 relation in a transitive stratum bears the 1 relation at the succeeding level.[40] Such constructions occur in Burushaski for many transitive verbs. Both inflectible verbs and uninflectible verbs can be passivized; however, since the form of the passive differs between the two verb types, I will discuss them separately. I will also give an argument that such clauses are indeed passives, based on the condition on equi victims in Burushaski.[41]

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[40] All references to 'passive' constructions in this section refer specifically to plain personal passives. See Perlmutter and Postal 1984b:137 for a discussion of other kinds of passive constructions that are used in languages.

[41] It should be noted however, that Burushaski has several ways to omit reference to the subject without using passives. One such way is to use a third person plural agreement suffix on the verb and obligatorily omit any overt third person pronoun. This is a very common strategy used in languages of the world (Keenan 1985:247). The verbal agreement suffix is in the third person plural form and the subject may have an arbitrary referent. See for example the following sentence.

| | | | | | |
|---|---|---|---|---|---|
| (vi) | ína | r | hán | tofáan | yuúcuman |
| | ín-e | r | hán | toofá-an | i-ú-c-uman |
| | 3sh-OBL | to | one,x | gift,x-INDEF/ABS | 3sm-give,x-NONPAST-3ph/FUT |

*They will give him a gift.*

There is another construction which might be thought to be a passive at first glance but which is probably best analyzed as a kind of cleft. Compare the following examples.

| | | | | | | |
|---|---|---|---|---|---|---|
| (vii) | a. | iné | gúse | hín | Guláaman | yánumo |
| | | iné | gús-e | hín | Guláam-an | i-yán-umo |
| | | DEMh | woman-ERG | one,h | slave,m-INDEF/ABS | 3sm-buy,m-3sf/PAST |

*That woman bought a slave.*

| | | | | | | |
|---|---|---|---|---|---|---|
| b. | hín | Guláaman | iné | gúse | yánum | bám |
| | hín | Guláam-an | iné | gús-e | i-yán-um | b-ám |
| | one,h | slave,m-INDEF/ABS | DEMh | woman-ERG | 3sm-buy,m-STATPRT | be-3sm/PAST |

*A slave was bought by that woman. (more literally: A slave the woman bought.)*

In the (b) example above the agent is marked by ERG case and the patient is in ABS case, but the position of these nominals is reversed. The verb occurs in the stative participle form and shows agreement with the patient. I have no explanation as to why object agreement should be with the patient in a clefted construction and the agent still be marked with ERG case.

This 'clefted' construction is the construction that Morin and Tiffou 1988:510 refer to as the pathetive construction. There are many examples of sentences of this sort, in which either the Agent or Patient can determine agreement on the auxiliary b *to be*.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (viii) | jaNgí | ké | yárum | hína | le | duró | étum | bái |
| | jaNgí | ké | yárum | hín-e | le | duró | é-t-um | b-ái |
| | Jangi | also | before | one-OBL | with | work | 3sy-do-STATPRT | be-3sm/PRES |

*Jangi is also one who worked with one before (as an apprentice).*

Many transitive verbs can occur in this form which do not allow passives of the sort described in the main part of this section. For example:

*4.2.1. Passives of uninflectible verbs*

Personal passives of uninflectible verbs are quite common.[42] To form the passive of an uninflectible verb, the auxiliary verb manáas *to become* is used in place of the auxiliary verb étas *to do* which occurs in active clauses.[43] The 'agent' in passive constructions is seldom expressed, but when it is, it is followed by the postposition tsum.[44] Some examples are given below.

---

(ix) hán cíizan sénum bilúm.
hán cíiz-an sén-um b-ilúm
one,y thing,y-INDEF/ABS say-STATPRT be-3sy/PAST
*One thing was said.*

The examples in their section on prefixed passives seem to clearly be passive constructions under the analysis presented in this paper however. I present their example (10) below.

(x) a. ne hír-e cel cá-m bá-i
the MASC man-ERG water Y ABS impound PRET-PTCPL be-3SG MASC SUBJ
*The man has impounded the water.*

b. cel du-cá-m duá
water Y ABS D-impound PRET-PTCPL be 3SG Y SUBJ
*The water has been impounded.*

[42] Not all uninflectible verbs have grammatical passive counterparts, as the example below illustrates.

(xi) a. khóne ámi curúT mótimi
khón-e á-mi curúT mó-t-imi
ant,x-ERG 1s-mother/ABS bite 3sf-do-3sx/PAST
*The ant bit my mother.*

b. *ámi khón tsum curúT mumánumo
*(My mother was bitten by the ant.)*

c. *ámi curúT mumánumo
*(My mother was bitten.)*

[43] I lack data to know if a passive of an uninflectible verb can have the auxiliary b 'to be' instead of manáas 'to become' when simple past or present tense is required, i.e. whether or not the following sentence is grammatical:

(xii) ?ú dáfa bám
ú dáfa b-ám
3p/ABS drive.out be-3ph/PAST
*?They were driven out.*

Knowing the answer to this question would be helpful later in section 6, when Burushaski auxiliaries are discussed.

[44] The postposition tsum does not only mark passive agents. The intransitive sentence in (xiii) below has no transitive counterpart. In this case tsun is not marking a passive agent but an oblique with the meaning 'by means of'. (The usual instrumental postposition is aTe 'on/with'.)

(xiii) a. bésan cíiz tsum guírcaa a
bésan cíiz tsum gu-ír-c-aa a
what thing,y/ABS by 2s-die-NONPAST-2s/FUT QUEST
*By means of what will you die?*

(The particle a is the unstressed clause final question particle in Burushaski. It can follow nouns, verbs, adverbs, adjectives and other parts of speech.)

(45) a. jáa ú dáfa ótam
jé-e ú dáfa ó-t-am
1s-ERG 3p/ABS drive.out 3p-do-1s/PAST
*I drove them out.*

b. ú dáfa umánuman
ú dáfa u-man'-uman
3p/ABS drive.out 3p-become-3ph/PAST
*They were driven out.*

(46) a. jáa ún wazíire aazáme kaa Thúmuk gótam
jé-e ún wazíire aazám-e kaa Thúmuk gó-t-am
1s-ERG 2s/ABS prime.minister,m-OBL with introduce 2s-do-1s/PAST
*I introduced you to the Prime Minister.*

b. ún wazíire aazáme kaa Thúmuk gumánuma
ún wazíire aazám-e kaa Thúmuk gu-man'-uma
2s/ABS prime.minister,m-OBL with introduce 2s-become-2s/PAST
*You were introduced to (met) the Prime Minister.*

(47) a. íne shishámuts táq ótumo
ín-e shishá-muts táq ó-t-umo
3sh-ERG window,x-PL/ABS smash 3p-do-3f/PAST
*She smashed the windows.*

b. shishámuts (ínmo tsum) táq umánie
shishá-muts ín-mo tsum táq u-man'-ie
window,x-PL/ABS 3sh-OBLf by smash 3p-become-3px/PAST
*The windows were smashed (by her).*

I propose a personal passive analysis for the (b) examples above. A diagram of (47b) is presented below (ignoring the issue of the auxiliary verb - see section 6).

(48)

| 2 | 1 | P |
|---|---|---|
| 1 | Cho | P |
| shishámuts | ínmo tsum | táq umánie |
| windows | by her | they became smashed |

Under this analysis shishámuts *windows* is a 2 in an initial transitive stratum and advances to 1. The initial 1, ín *she*, is put en chômage and assumes the Chômeur relation.[45] This analysis however, introduces a number of problems with the verb agreement and case marking rules as formulated in (37) and (38).

First, the verb agreement rules in (37) are no longer adequate. Rule (37a) states that the verb agrees with nuclear terms. Both nominals in (48) (shishámuts *windows* and ín *she*) head nuclear term arcs, but the auxiliary umánie *they become* shows agreement only with shishámuts. Also, verb agreement rule (37b) states that a nominal heading a 1 arc determines subject agreement. In *she* heads an initial 1 arc but does not determine this agreement. If these rules are revised as in (49) below, all of the agreement facts presented here are accounted for, as well as those presented in previous sections.

[45] Chômeur in French means 'unemployed'. A nominal which is put en chômage is no longer available to assume any grammatical relation or to participate in any grammatical relation changing construction.

(49) Verb agreement rules (working version b)

a. The verb agrees with final nuclear terms.

b. A final nuclear term which heads a 1 arc (in any stratum) determines subject agreement.

c. A final nuclear term which heads a 2 arc (in any stratum) determines object agreement.

Shishámuts *windows* is a final nuclear term and therefore qualifies to trigger verb agreement. As a 1 it determines subject agreement and as a 2 it determines object agreement, just as we saw with nominals that undergo unaccusative advancement.[46] The constraint that the verb agrees only with final nuclear terms blocks the 1-chômeur from triggering subject agreement.

The case marking rules in (38) also need revision. The fact that the 1-chômeur in (48) (in *she*) occurs in OBL case and is followed by the postposition tsum needs to be stated. More importantly, case marking rule (38d) states that any nominal which is an ergative in a non-future tense clause is marked with ERG case. In *she* is an initial ergative and the verb is in the past tense, yet this nominal is not marked by ERG case. Again, if the pertinent rules are revised as follows, all of the agreement facts presented here are accounted for, as well as those presented in previous sections.

(50) Case marking rules (working version b, partial list)

b. A nominal which is a 1-chômeur or which heads a Source arc is flagged with the postposition tsum.

d. A nominal which is an ergative and heads only a 1 arc in a non-future tense clause is marked by ERG case.[47]

The constraint that a nominal be an ergative and head only a 1 arc blocks ERG case marking for the initial 1 of a passive. In *she* is an initial ergative, but since it heads a final chômeur arc it is not marked by ERG case. Since it is a 1-chômeur it is followed by the postposition tsum. (The 1-chômeur is optional in this case, though with many other verbs it is either disallowed or marginally acceptable.) Shishámuts *windows* is unmarked (in ABS case) by default and occurs sentence initially since it is the final subject.

*4.2.2. Passives of uninflectible verbs with no object agreement*

Recall from section 2 that with many verbs without a d- prefix, "y" class nouns do not trigger object agreement (there is no agreement prefix). This is true also for the auxiliary verb manáas *to become*. In unaccusative constructions with this verb, where an h or "x" class initial 2 determines object agreement a "y" class initial 2 will not. Example set (25) from section 2 is repeated below.

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[46] An alternative analysis to account for the fact that shishámuts 'windows' determines object agreement on the auxiliary verb manáas *to become* will be presented in section 6. For the time being, the fact that shishámuts heads both a final nuclear term arc and a 2 arc is adequate to account for this.

[47] This constraint will also be necessary in the analysis of antipassive constructions in the next section. The notion 'final ergative' is insufficient because it fails to account for case marking in 2-3 retreat constructions (also discussed in section 5).

(51) a. sá lálam imánibim
sá lálam i-man'-ibim
sun.x/ABS shine 3sx-become-3sx/PSTPRF
*The sun had shone.*

b. GéniSh lálam manílum
GéniSh lálam man'-ilum
gold.y/ABS shine become-3sy/PSTPRF
*The gold had glittered.*

"Y" class initial 2s in passives of uninflectible verbs also do not trigger object agreement, as the following examples show.

(52) a. íne tshíl taDáq étimi.
ín-e tshíl taDáq é-t-imi
3sh-ERG water.y/ABS spill 3sy-do-3sm/PAST
*He spilled the water.*

b. tshíl (ín tsum) taDáq manímí.
tshíl ín tsum taDáq man'-imi
water.y/ABS 3sh/ABS by spill become-3sy/PAST
*The water was spilled (by him).*

There is also a subset of "x" class plural nouns which trigger object agreement in active sentences with uninflectible verbs, yet do not do so in the corresponding passive sentences. I will call these nouns 'seeds' class nouns. I give some examples below.

(53) a. íne Gunó pháu ótimi
ín-e Gunó pháu ó-t-imi
3sh-ERG seed.xp/ABS scatter 3px-do-3sm/PAST
*He scattered seeds.*

b. Gunó (ín tsum) pháu manímie
Gunó ín tsum pháu man'-imie
seed.xp/ABS 3sh/ABS by scatter become-3px/PAST
*Seeds were scattered (by him).*

(54) a. jáa bukák shár ótam
jé-e bukák shár ó-t-am
1s-ERG beans.xp/ABS scatter 3px-do-1s/PAST
*I scattered the beans (seeds).*

b. bukák shár manímie
bukák shár man'-imie
beans.xp/ABS scatter become-3px/PRSPRF
*The beans have become scattered.*

In all these cases there is object agreement in the verb in the active clauses but no object agreement in the passive clauses.

In order to keep our object agreement rule in (49c) above, we need to add the following statement to the grammar:

(55) Nouns of the 'seeds' class do not determine object agreement on the auxiliary manáas.[48]

*4.2.3. Passives of inflectible verbs*

There is a class of inflectible verbs in Burushaski which have both 'active' and 'passive' forms. Most of these verbs begin with the d- prefix. In the active form, a stressed object agreement prefix comes between the d- and the verb root. This prefix shows person and number agreement with h and "x" class direct objects, and third person singular (but not plural - see section 2.3.3) agreement with "y" class direct objects. In the passive form an unstressed u- prefix occurs in this position and the first syllable of the root is stressed. I will refer to this u- prefix as the passive prefix.[49] Some of these verbs are listed in (56) below.

(56)

| | Active | Passive | Gloss |
|---|---|---|---|
| a. | désalaTas | dusálaTas | *wrap up* |
| b. | dímatas | dumátsas | *roll up* |
| c. | díqharas | duqháras | *split* |
| d. | díshunas | dushúnas | *untie* |
| e. | dítsikinas | dutshíginas | *hang up* |
| f. | ipháTaras | dupháTaras | *skin* |
| g. | déeNGuras | doóNGuras | *bend* |
| h. | déshayas | disháyas | *stop* |
| i. | iqháras | qaráas | *smash* |
| j. | dípirtsas | diphírtsas | *pull out* |

There is some variation in the form of the passive prefix in (56). This is perhaps due to vowel harmony and other factors. The main point to be made here however, is that the passive verb

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[48] This statement would eventually be broadened to include a number of verbs where 'seeds' class nouns pattern like "y" nouns in not triggering object agreement. Consider example (ix) below.

(ix) a.

| | | |
|---|---|---|
| jáa | ín | iltánam |
| jé-e | ín | i-ltán-am |
| 1s-ERG | 3sh/ABS | 3sm-beat-1s/PAST |

*I beat him.*

b.

| | | |
|---|---|---|
| jáa | ún | gultánam |
| jé-e | ún | gu-ltán-am |
| 1s-ERG | 2s/ABS | 2s-beat-1s/PAST |

*I beat you.*

c.

| | | |
|---|---|---|
| doobíe | gaTóN | tanímí |
| doobí-e | gaTóN | ltan-ímí |
| washerman-ERG | clothing,yp/ABS | beat-3sm/PAST |

*The washerman beat the clothes.*

d.

| | | |
|---|---|---|
| gúse | makái | tanúmo |
| gús-e | makái | ltan-úmo |
| woman-ERG | corn,xp | beat-3sf/PAST |

*The woman beat the corn.*

In (ix.d) a 'seeds' class noun makái 'corn' does not trigger object agreement. (The l of ltánas 'to beat' deletes word-initially; it may also be analyzed as a separate prefix.) This is an idiosyncratic property of this verb; with most other inflectible verbs and with uninflectible verbs, makái does trigger object agreement. I do not know how many verbs there are in this class.

[49] In a broader context this could be called an intransitive prefix.

always has this passive morpheme and does not show object agreement at all. Let me illustrate with some sentence examples.

(57) a. hamíide haránC détsanai
hamíid-e haránC d-é-tshan-ai
Hamid-ERG pitchfork,y/ABS d-3sy-straighten-3sm/PRSPRF
*Hamid has straightened the pitchfork.*

b. haránC dutshánila
haránC d-u-tshán-ila
pitchfork,y/ABS d-PASS-straighten-3sy/PRSPRF
*The pitchfork has been straightened.*

(58) a. dasíne bamphú dépaltubom
dasín-e bamphú d-é-phalt-ubom
girl-ERG balloon,x/ABS d-3sx-burst-3sf/PSTPRF
*The girl had burst the balloon.*

b. bamphú (dasínmo tsum) dupháltibim
bamphú dasín-mo tsum d-u-phált-ibim
balloon,x/ABS girl-OBLf by d-PASS-burst-3sx/PSTPRF
*The balloon had been burst (by the girl).*

(59) a. shaafiáa makái dóshulubo
shaafiá-e makái d-ó-shul-ubo
Shafia-ERG corn,xp/ABS d-3px-shell-3sf/PRSPRF
*Shafia has shelled the corn (from the cob).*

b. makái dushólie
makái d-u-shól-ie
corn,xp/ABS d-PASS-shell-3px/PRSPRF
*The corn has been shelled.*

(60) a. íne jé dápaTarimi
ín-e jé d-á-phaTar-imi
3sh-ERG 1s/ABS d-1s-accomodate-3sm/PAST
*He accommodated me.*

b. jé dupháTaram
jé d-u-pháTar-am
1s/ABS d-PASS-accomodate-1s/PAST
*I was accommodated.*

(61) a. íne jé dápirtsimi
ín-e jé d-á-phirts-imi
3sh-ERG 1s/ABS d-1s-pull.out-3sm/PAST
*He pulled me out.*

b. jé diphírtsam.
jé d-u-phírts-am
1s/ABS d-PASS-pull.out-1s/PAST
*I was pulled out.*

If we account for this unstressed u- prefix by positing a personal passive analysis for the (b) examples above, the stratal chart for (58b) would have the following form:

| (62) | 2 | 1 | P |
|---|---|---|---|
| | 1 | Cho | P |
| | bamphú | dasínmo tsum | dupháltimi |
| | balloon | by the girl | it was burst |

Bamphú *balloon* is a final nuclear term and also heads a 1 arc and thus determines subject agreement. Dasín *girl* is a 1-chômeur and is followed by the postposition tsum *from*.

The problem with this analysis is that bamphú fails to trigger object agreement, although it is both a final nuclear term (a subject) and heads a 2 arc. We can account for this by adding the following statement to the set of verb agreement rules presented thus far:

(63) The u- prefix registers passive on inflectible verbs and blocks object agreement.[50]

Passive morphology is indicated by the u- prefix on the verb dupháltimi *it was burst* and therefore blocks the occurrence of an object agreement prefix.[51]

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[50] Not every verb which begins with d- and the u- prefix necessarily has a corresponding active form. There is no corresponding transitive form of dupháreskinas *to spread* (as in 'a rash spreads'), i.e. *dépareskinas. Such verbs show no object agreement.

[51] An alternative to the personal passive analysis for the examples above is to posit an impersonal passive. Example (53b) under this analysis is presented below in diagram form.

| (xv) | 2 | 1 | P | |
|---|---|---|---|---|
| | Cho | 1 | P | 2 |
| | Cho | Cho | P | 1 |
| | bamphú | dasínmo tsum | dupháltimi | Dummy |
| | balloon | by the girl | it was burst | |

In this case a silent third person plural "y" class dummy comes in as 2 and puts the initial 2 en chômage and advances to 1. Burushaski would employ the brother-in-law option for subject agreement and therefore the features of the initial 2 are relevant for subject agreement. The dummy, since it heads both a final nuclear term arc and a 2 arc, triggers object agreement in the verb with the unstressed third person plural prefix u- (with allomorphs i-, oó- and Ø-).

In passives of uninflectible verbs, the auxiliary verb manáas *to become* is used. Since manáas never shows agreement with "y" class nouns (see discussion above), there is no prefix.

In this analysis, there is no 'passive' prefix and we need no constraint saying that passive morphology blocks object agreement. Object agreement is determined by independent principles relating to "y" class plural pronouns. The grammar would have to prohibit 'seeds' class nominals from being final 1s in passives.

One disadvantage of the impersonal passive analysis is that it fails to explain why the u- prefix would have allomorphic variation when showing agreement with a third person plural "y" class dummy, yet have no such variation when showing agreement with a third person plural h or "x" class 2 (direct object) of an unaccusative or transitive verb. I lack data to argue further for either of these two analyses.

It should be noted that neither personal nor impersonal passives interact with any other advancement or retreat constructions (i.e. not with 3-2 advancement, Source-2 advancement, 2-3 retreat, antipassive or inversion). Also, there are no impersonal passives of intransitive verbs.

*4.2.4. An argument for passive based on equi*

This section presents an argument supporting a passive analysis of these clauses. Specifically it supports the claim that the 'patient' is the final 1 of the clause.

In Burushaski, clausal complements of the verbs rái étas *to want*, pasán étas *to like* and faisalá étas *to decide* have verbs which occur in the infinitival form followed by the postposition r *to*.[52] When the subject of the complement is not coreferential with the subject of the main clause, it must appear overtly. When the two subjects are coreferential the complement subject may not appear overtly. Some examples follow.

(64) a.
| | | | | | |
|---|---|---|---|---|---|
| jáa | úŋ | níasa | r | rái | écabaa |
| jé-e | úŋ | ní-as-e | r | rái | é-t-c-abaa |
| 1s-ERG | 2s/ABS | go-INF-OBL | to | want | 3sy-do-NONPAST-1s/PRES |

*I want you to go.*

b.
| | | | | |
|---|---|---|---|---|
| jáa | níasa | r | rái | écabaa |
| jé-e | ní-as-e | r | rái | é-t-c-abaa |
| 1s-ERG | go-INF-OBL | to | want | 3sy-do-NONPAST-1s/PRES |

*I want to go.*

c. *jáa jé níasa r rái écabaa
*(I want to go.)*

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[52] When the direct object is a complement clause, the complement verb is sometimes not followed by r *to*.

(xvi)
| | | | | | | |
|---|---|---|---|---|---|---|
| úe | dasíwants | míma | r | miúas | rái | ayécaan |
| ú-e | dasín-ants | mi-e | r | mi-ú-as | rái | a-é-t-c-aan |
| 3p-ERG | girl-PL/ABS | 1p-OBL | to | 1p-give,h-INF | want | NEG-3sy-do-NONPAST-3ph/PRES |

*They do not want to give girls to us (in marriage).*

I do not understand the conditions on the presence or absence of r in these cases, but it does not appear to be relevant to the discussion of equi in this section.

Sometimes in sentences with rai *to want*, the matrix subject is a possessor and the auxiliary b *to be* or manáas *to become* is used in the main clause. The complement may or may not be followed by r *to*.

(xvii) a.
| | | | | |
|---|---|---|---|---|
| ámine | gánas | rái | bilá | ké |
| ámin-e | gán-as | rái | b-ilá | ké |
| RELhs-ERG | take,y-INF | want | be-3sy/PRES | COMP |

*Whoever wants to take (it)... (Lit. Whoever's desire to take is...)*

b.
| | | | | | |
|---|---|---|---|---|---|
| úu | úmie | búT | rái | meíbila | ziaadátar |
| u-u | u-mi-e | búT | rái | man'-c-bila | ziaadátar |
| 3p-father | 3p-mother-ERG | much | want | become-NONPAST-3sy/FUT | usually |

*Their father and mother will usually want very much (to choose partners for their children).*
*(Lit. Their father's and mother's great desire usually will be.)*

Rái *to want* can also occur in an inversion construction as is shown below (see section 5 for discussion of inversion in Burushaski).

(xviii)
| | | | | | |
|---|---|---|---|---|---|
| ágar | úa | r | rái | bilá | ké |
| ágar | ú-e | r | rái | b-ilá | ké |
| if | 3p-OBL | to | want | be-3sy/PRES | COMP |

*If they want to...*

This condition is commonly called 'Equi', and rules are typically formulated in grammars based on what coreferential nominals cannot appear overtly in the subordinate clause, i.e. what nominals are equi 'victims'. The following example shows that 2s are not equi victims in Burushaski.

(65) gúse híre ín mudélasa r
gús-e hír-e ín mu-del-as-e r
woman-ERG man-ERG 3sh/ABS 3sf-hit-INF-OBL to

rái ayécubo
rái a-é-t-c-ubo
want NEG-3sy/PRES-do-NONPAST-3sf/PRES
*The woman doesn't want the man to hit her.*

In (65) ín *her* is the 2 of the complement clause and it is not an equi victim.

The following sentences show that the 'Patient' nominal in a passive complement clause is an equi victim. (66a) is a monostratal transitive clause; jé *I* is a 2. (66b) is the passive counterpart of this sentence in which the initial 2 has advanced to 1.

(66) a. políise jé bán átuman
políis-e jé bán á-t-uman
police-ERG 1s/ABS imprison 1s-do-3ph/PAST
*The police imprisoned me.*

b. jé bán amánam
jé bán a-man'-am
1s/ABS imprison 1s-become-1s/PAST
*I was imprisoned.*

(67a,b) show that when this passive clause is the complement of rái *want*, jé *I* may not appear overtly, as would be predicted if jé is a final 1.

(67) a. jáa bán amánasa r rái ayétam
jé-e bán a-man'-as-e r rái a-é-t-am
1s-ERG imprison 1s-become-INF-OBL to want NEG-3sy-do-1s/PAST
*I did not want to be imprisoned.*

b. *jáa jé bán amánasa r rái ayétam
1s/ABS
*(I did not want to be imprisoned.)*

The examples below illustrate equi with an inflectible verb.

(68) a. íne ún dukópirtsimi
ín-e ún d-go-phirts-imi
3sh-ERG 2s/ABS d-2s-pull.out-3sm/PAST
*He pulled you out.*

b. ún dipírtsuma
ún d-u-phirts-uma
2s/ABS d-PASS-pull.out-2s/PAST
*You were pulled out.*

c. úne dipírtsasa r rái ayétuma
úη-e d-u-phirts-as-e r rái a-é-t-uma
2s-ERG d-PASS-pull.out-INF-OBL to want NEG-3sy-do-3sm/PAST
*You didn't want to be pulled out.*

d. *úne úη dipírtsasa r rái ayétuma
*(You did not want you to be pulled out.)*

Example (68a) shows a monostratal clause in which úη *you* is the direct object. (68b) is a passive clause in which úη is a final subject. In (68c) this nominal is not present due to equi; its arc is 'erased'. (68d) shows that when this nominal is present the result is ungrammatical.

When a matrix clause with an equi controlling verb (such as rái *to want*) contains a complement with a passivized verb (whether inflectible or uninflectible), the 'patient' in the complement is an equi victim. This, together with the verb agreement facts noted earlier, provides evidence that the 'patient' in a passive clause is a final 1.

*4.3. Source-2 advancement*

As noted in section 1, an object agreement prefix can be determined by a Source nominal.

(69) hiléseη dasínmo tsum pén mushíirimi
hilés-eη dasín-mo tsum pén mu-shíir-imi
boy-ERG girl-OBLf from pen,x/ABS 3sf-snatch-3sm/PAST
*The boy snatched the pen from the girl.*

This sentence would be grammatical without the Source nominal being present; if present, the Source is flagged with the postposition tsum *from*. The agreement prefix is obligatory and indicates the Source.[53] In no case can object agreement be with pén *pen*.

These facts can be accounted for by positing obligatory Source-2 advancement for the verb shíiras *to snatch*. Example (69) is presented below in chart form:

(70)

| 1 | Source | 2 | P |
|---|---|---|---|
| 1 | 2 | Cho | P |
| hiléseη | dasínmo tsum | pén | mushíirimi |
| boy | from the girl | pen | he snatched (from) her |

In the Source-2 advancement analysis there are two different nominals heading 2 arcs. Only dasín *girl* is a final nuclear term however, and therefore it and not pén *pen* determines object agreement. Dasín also heads a Source arc and is followed by the postposition tsum *from*. Hilés *boy* is a final 1 so it triggers subject agreement. It also is an ergative and heads only a 1 arc, so it is marked with ERG case. As a 2-chômeur, pén is unmarked.

With the verb shíiras *to snatch*, Source-2 advancement is obligatory. With at least one other verb it is optional.[54] The most common usage of the verb duGárusas *to ask* is in a monostratal clause such as in (71).

---

[53] If a Source is not implied, another verb is used, such as GaJám étas *to grab* or tshúas *to take*.

[54] The verb dúmaras *to request* also allows a Source-2 construction.

(xix) a. jáa úη tsum bésan dúmaram
jé-e úη tsum bésan d-mar-am
1s-ERG 2s/ABS from something/ABS d-request-1s/PAST
*I requested something from you.*

(71) búT síse (hamíid tsum) sawáaliN duGárusuman.
búT sís-e hamíid tsum sawáal-iN d-Garus-uman
many people-ERG Hamid/ABS from question,y-PL/ABS d-ask-3ph/PAST
*Many people asked questions (of Hamid).*

This sentence is straightforwardly accounted for by the rules proposed thus far if it is analyzed as a monostratal clause.

(72)

| 1 | Source | 2 | P |
|---|---|---|---|
| búT síse | Hamíid tsum | sawáaliN | duGárusuman |
| many people | from Hamid | questions | they asked |

There is no object agreement with "y" class direct object sawáaliN *questions*; the form of this verb in this construction remains constant, whether one or several questions are being asked.[55] The verb duGárusas is similar in this way to some other transitive verbs which require direct objects that are "y" class nouns and allow no agreement prefix, such as sénas *to say*, Gatánas *to read*, and girmínas *to write*.[56] The verb duGárusas *to ask* also occurs in sentences such as the following:

(73) búT síse hamíid sawáaliN déGurusuman.
búT sís-e hamíid sawáal-iN d-é-Garus-uman
many people-ERG Hamid/ABS question,y-PL/ABS d-3sm-ask-3sm/PAST
*Many people questioned Hamid.*

Two things are different in this example. One is that the verb agrees with hamíid *Hamid* as direct object. Second, hamíid is in ABS case.[57] Assuming Source-2 advancement, we could diagram (73) as follows.

---

b. jáa ún tsum bésan dukómaram
d-gó-mar-am
d-2s-request-1s/PAST
*I requested you something.*

The sense in example (xix.b) seems to be that I am requesting something from you for your benefit. This usage is very limited however, and is not acceptable to some speakers.

[55] It is unclear what the u- after the d- prefix is doing in the form duGárusuman *they asked*. It is possibly simply inserted epenthetically to break up the disallowed dG consonant cluster.

[56] Some other transitive verbs which do not allow an object agreement prefix are mináas *to drink*, hikínas *to learn*, thías *to pour*, wáaras *to cover*, and Garkáas *to catch*. These verbs usually occur in monostratal clauses and require objects of the "y" class, which may explain the lack of an agreement prefix. (One of them, Gârkáas *to catch*, may allow an "x" class object. I have an example of this verb in a sentence with tharií *ball* as the direct object. tharií is an "x" class noun.)

[57] I have a few examples in my data where, when this verb is showing agreement with the Source, the Source nominal is followed by the postposition tsum *from*. In most cases however it occurs in ABS case. In elicitation also, ABS was given as the proper case for the Source when this verb agrees with it. For the cases where the Source postposition is allowed, the rule in (75) would have to be marked as optional.

(74)

| 1 | Source | 2 | P |
|---|---|---|---|
| 1 | 2 | Cho | P |
| búT síse | hamíid | sawáaliN | déGurusuman |
| many people | Hamiid | questions | they-asked-him |

Now hamíid is a final 2 and triggers object agreement. Since hamíid is not followed by the postposition tsum *from* however, the rule for this marker must be revised to prohibit it when the nominal heading a Source nominal in a clause with duGárusas *to ask* also heads a final 2 arc.

This rule now has the following form:

(75) A nominal which is a 1-chômeur, or which heads a Source arc (and is not the final 2 of duGárusas) is flagged with the postposition tsum.[58]

*4.4 3-2 advancement*

Burushaski has at least five verbs that take recipients.[59] One of these, the uninflectible verb piish *to present*, was shown in section 3, example (34) in a monostratal clause and is shown here as (76).

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[58] Alternatively, it could be said that tsum *from* flags final Sources, and that shiíras *to snatch* idiosyncratically flags its final 2 with tsum. This would then be an instance of quirky case marking associated with this verb.

The case marking rule stated in (75) on the other hand expresses a generality which applies not only to the marking of Sources, but also to the marking of indirect objects and Possessors. What these rules have in common is that none of them make reference to the levels at which a nominal bears these relations. If a nominal heads one of these arcs at any level, it receives the appropriate marking. More will be said about the case marking of indirect objects and Possessors in the next section and in section 7.

[59] There are other constructions in which initial indirect objects occur, however. There is a set of verbal nouns which are followed by the auxiliary verb étas *to do*. Some examples follow.

(xx) a.

| gusé | tharmása | r | sháN | é |
|---|---|---|---|---|
| gusé | tharmás-e | r | sháN | é-t-0 |
| DEM3xs | thermos-OBL | to | care,y | 3sy-do-IMP |

*Take care of this thermos!*

b.

| jáa | qhudáaya | r | shúkuro | étam |
|---|---|---|---|---|
| jé-e | qhudáa-e | r | shúkuro | é-t-am |
| 1s-ERG | God-OBL | to | thanks,y | 3sy-do-1s/PAST |

*I thanked God (Lit., I did thanks to God.)*

c.

| jáa | úa | r | Sháu | étam |
|---|---|---|---|---|
| jé-e | ú-e | r | Sháu | é-t-am |
| 1s-ERG | 3p-OBL | to | slap,y | 3sy-do-1s/PAST |

*I slapped them. (Lit., I did a slap to them.)*

The verbal noun is the direct object of the clause; it always triggers third person "y" class object agreement (using the prefix é-) and occurs in ABS case. The thing being acted upon is the indirect object and is followed by the postposition r *to*. This nominal can never trigger agreement in the auxiliary étas as the following example shows.

(76) hilése dasínmo r toofámuts píish ótimi.
hilés-e dasín-mo r toofá-muts píish ó-t-imi
boy-ERG girl-OBLf to gift,x-PL/ABS present 3px-do-3sm/PAST
*The boy presented a gift to the girl.*

The initial/final direct object triggers verb agreement and occurs in ABS case while the initial/final indirect object is followed by the postposition r *to*. However four other verbs which take recipients obligatorily follow a different pattern. Consider the following sentences.

(77) a. jáa ínmo r hán cáGan mósabayam.
jé-e ín-mo r hán cáGa-an mó-s-abayam
1s-ERG 3sh-OBLf to one story,y-INDEF/ABS 3sf-tell-1s/PRSPRF
*I have told her a story.*

b. jáa ínmo r hán gitáapan muchíabayam
jé-e ín-mo r hán gitáap-an mu-chí-abayam
1s-ERG 3sh-OBLf to one book,ys-INDEF/ABS 3sf-give,ys-1s/PRSPRF
*I have given her a gift.*

c. jáa ínmo r káman brás muGúnabayam.
jé-e ín-mo r káman brás mu-Gún-abayam
1s-ERG 3sh-OBLf to some rice,yp/ABS 3sf-give,yp-1s/PRSPRF
*I have given her some rice.*

d. jáa ínmo r hán tofáan muúwabayam.
jé-e ín-mo r hán toofá-an mu-ú-abayam
1s-ERG 3sh-OBLf to one gift,x-INDEF/ABS 3sf-give,x-1s/PRSPRF
*I have given her a gift.*

The difference between these sentences and the one in (76) is in the object agreement on the verb. Rather than showing agreement with the patient, the verb shows agreement with the recipient. Positing obligatory 3-2 advancement for these verbs, we could diagram (77d) as follows.

(78)
| 1 | 3 | 2 | P |
|---|---|---|---|
| 1 | 2 | Cho | P |

| | | | |
|---|---|---|---|
| jáa | ínmo r | hán tofáan | muúwabayam |
| I | to her | a gift | I have given her |

Under this analysis, of the two nominals heading 2 arcs, only ínmo *her* is a final nuclear term and therefore it and not hán tofáan *a/one gift* properly triggers direct object agreement on the verb. The generalization given in (38a) also accounts for the presence of the postposition r *to* since it does not refer to any particular level. Inmo heads a 3 arc; therefore the postposition r must occur.

---

(xxi) *jáa úa r Sháu ótam
jé-e ú-e r Sháu ó-t-am
1s-ERG 3p-OBL to slap,y 3p-do-1s/PAST
*(I slapped them.)*

These verbal noun plus étas *to do* constructions are not the same syntactically as clauses with uninflectible verbs plus auxiliaries such as those illustrated in section 3, example (34) and discussed in section 6.

*4.5 Benefactive-3 advancement*

The postposition gáne most often follows a verb in the infinitive form and indicates Purpose, as in the following example.

(79)

| | | | | | | |
|---|---|---|---|---|---|---|
| zamindáar | tshíl | yálase | gáne | mála | r | nimi. |
| zamindáar | tshíl | yál-as-e | gáne | mál-e | r | ni-imi |
| farmer,m/ABS | water,y | apply-INF-OBL | for | field,y-OBL | to | go-3sm/PAST |

*The farmer went to the field to water (it).*

However gáne can also mark Benefactives.

(80)

| | | | | | |
|---|---|---|---|---|---|
| jáa | úne | gáne | cái | tayáar | étam. |
| jé-e | ún-e | gáne | cái | tayáar | é-t-am. |
| 1s-ERG | 2s-OBL | for | tea,y/ABS | prepare | 3sy-do-1s/PAST |

*I prepared tea for you.*

Although the sentence in (80) is perfectly acceptable and would be used in certain contexts, the same idea is more commonly expressed this way:

(81)

| | | | | | |
|---|---|---|---|---|---|
| jáa | góo | r | cái | tayáar | étam |
| jé-e | gó-e | r | cái | tayáar | étam |
| 1s-ERG | 2s-OBL | to | tea,y/ABS | prepare | 3sy-do-1s/PAST |

*I prepared tea for you.*

In (81) the second person nominal is marked with r *to* rather than gáne *for*.[60] Although the exact constraints on the usage of the constructions in (80) and (81) are unclear, positing Benefactive-3 advancement accounts for the difference in the two. (81) would be diagrammed like this:

(82)

| | | | |
|---|---|---|---|
| 1 | Ben | 2 | P |
| 1 | 3 | 2 | P |

| | | | |
|---|---|---|---|
| jáa | góo r | cái | tayáar étam |
| I | for you | tea | I prepared it |

In order to block the postposition gane *for* and permit indirect object marking rule (38a) to operate, the case marking rules that refer to oblique relations would have the following additional line:

(83) A nominal heading a final Benefactive arc is flagged with the postposition gáne.

To summarize this section, I will gather together the current versions of the verb agreement and case marking rules that have been presented thus far.

(84) Verb agreement rules (working version c)

a. The verb agrees with final nuclear terms.

b. A final nuclear term which heads a 1 arc (in any stratum) determines subject agreement.

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[60] The shape of the second person pronoun in these two examples is different. In (80) the second person singular personal pronoun ún is used. In (81) the second person singular object agreement prefix gó- is used.

c. A final nuclear term which heads a 2 arc (in any stratum) determines object agreement.

(85) Case marking rules (working version c)

a. A nominal which heads a 3 arc (in any stratum) is flagged with the postposition r.

b. A nominal which is a 1-chômeur, or which heads a Source arc (in any stratum, and which is not the final 2 of duGárusas) is flagged with the postposition tsum.

c. A nominal which heads a POSS arc (in any stratum) is marked with OBL case.

d. A nominal which heads a final Benefactive arc is flagged with the postposition gáne.

e. A nominal which is an ergative and heads only a 1 arc (in any stratum) in a non-future tense clause is marked by ERG case.

f. The u- prefix registers passive on uninflectible verbs and blocks object agreement.

g. Nouns of the 'seeds' class do not determine object agreement on the verb manáas.

**5. Retreats**

In Relational Grammar terminology, a nominal 'retreats' when it bears two grammatical relations at successive levels in a clause, and the later relation is lower on the relational hierarchy (1 > 2 > 3 > nonterms). Burushaski has three retreat constructions: 2-3 retreat, inversion, and antipassive.

*5.1. 2-3 retreat*

The verb Garáas *to talk (badly)* can appear in two types of clauses. When there is an addressee, the agent is marked by ERG case and the addressee is followed by the postposition r *to*.

(86)

| | | | |
|---|---|---|---|
| íne | hiléser | | Garícubo |
| ín-e | hilés-e | r | Gar'-c-ubo |
| 3sh-ERG | boy-OBL | to | talk.badly-NONPAST-3sf/PRES |

*She scolds the boy.*

If either ín *she* or hilés *boy* in (86) were in ABS case, the entence would be ungrammatical. However, when there is no addressee, the agent does occur in ABS case.

(87)

| | | |
|---|---|---|
| ín | búT | Garícubo |
| ín | búT | Gar'-c-ubo |
| 3sh/ABS | much | talk.badly-NONPAST-3sf/PRES |

*She curses a lot.*

To analyze both of these sentences as being monostratal, (86) with a 1 and a 3 and (87) with only a 1, would fail to account for the ERG case marking of ín *she* in (86). Positing obligatory 2-3 retreat for clauses containing Garáas *to talk (badly)* which have initial addressees could provide a solution. The example sentences above would be diagrammed this way:

(88) a.

| 1 | P |
|---|---|
| ín | Garícubo |
| she | curses |

| b. | 1 | 2 | P |
|---|---|---|---|
| | 1 | 3 | P |
| | íne | hiléser | Garícubo |
| | she | to the boy | scolds |

In this analysis, when an addressee is present in a clause containing Garáas, it is obligatorily demoted to 3 and is therefore necessarily followed by the postposition r. Since no nominal heads both a final nuclear term arc and a 2 arc, there is no object agreement on the verb. The agent in (88b) is an ergative heading only a 1 arc and is thus marked with ERG case.

Another verb which might be analyzed as requiring a 2-3 retreat construction is barénas *to look*. Consider the following example.

| (89) | jáa | úna | r | mál | ulo | barénam |
|---|---|---|---|---|---|---|
| | jé-e | ún-e | r | mál | ulo | barén-am |
| | 1s-ERG | 2s-OBL | to | field,y/ABS | in | look.at-1s/PAST |
| | *I looked at you in the field.* | | | | | |

Whenever a stimulus is present in a clause with barénas, it must be followed by the postposition r *to* and the experiencer must be marked with ERG case. The verb never allows an agreement prefix (except when causativized - see section 8). If we assume a 2-3 retreat analysis for (89), ún *you* is a 3 and is thus followed by the postposition r. Since it is not a final nuclear term, it does not trigger object agreement. Jé *I* is an ergative heading only a 1 arc and receives ERG case marking.

One possible problem with an obligatory 2-3 analysis for clauses with barénas *to look* however comes from sentences without a stimulus present. In the examples in my data, when barénas is used without a stimulus, but with an adverb, as in 'to look up', the subject is still marked with ERG case.

| (90) | béshal | hamíide | yáTne | barénimi | ké |
|---|---|---|---|---|---|
| | béshal | hamíid-e | yáTne | barén-imi | ké |
| | when | Hamid-ERG | upwards | look.at-3sm/PAST | COMP |
| | *When Hamid looked up ...* | | | | |

The simplest analysis for the sentence in (90) is as a monostratal unergative construction. This fails to accoùnt for the ERG case marking on hamíid *Hamid*, however. If barénas is lexically marked as requiring an initial 2, whether specified or not, we could keep a straightforward 2-3 retreat analysis. Example (90) is diagrammed below.[61]

| (91) | 1 | 2 | Loc | P |
|---|---|---|---|---|
| | 1 | 3 | Loc | P |
| | hamíide | UN | yáTne | barénimi |
| | Hamid | UN | upwards | he looked |

*5.1.1. Two anomalies*

There are two verbs which occur in constructions similar to 2-3 retreat, yet do not fit into the above analysis. These are gaTáas *to bite* and duúnas *to arrest*. Examples with these verbs are presented below.

[61] I will ignore the actual structure of the predicate with the adverb yáTne *upward*, as it is not relevant to this discussion.

(92) a. jáa báalt tse gaTáam
jé-e báalt tse gaT'-am
1s-ERG apple.x/ABS onto bite-1s/PAST
*I bit the apple.*

b. políise jáa tse duúnimi
políis-e jé-e tse duún-imi
policeman-ERG 1s-OBL onto arrest-3sm/PAST
*The policeman arrested me.*

Agents with these verbs must be marked by ERG case.[62] Patients must be followed by the postposition tse *onto*. They cannot occur in ABS case without this postposition and they cannot be followed by the postposition r *to*. There seem to be three choices for analysis of the examples in (92), each of which presents problems. The alternatives are diagrammed in (93).

(93) a.

| 1 | Mal | P |
|---|---|---|
| políise | jáa tse | duúnimi |
| policeman | onto me | he caught |

b.

| 1 | Mal | P |
|---|---|---|
| 1 | 2 | P |
| políise | jáa tse | duúnimi |
| policeman | onto me | he caught |

c.

| 1 | 2 | P |
|---|---|---|
| 1 | Mal | P |
| políise | jáa tse | duúnimi |
| policeman | onto me | he caught |

Example (93a) gives no account for ERG case marking on the subject. Example (93b) gives no account for the lack of object agreement on the verb. Example (93c) violates the Oblique Law which requires that any nominals heading oblique arcs head them in the initial stratum. It is

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[62] There are two unergative verbs with subjects in ABS case, homophonous to gaTáas *to bite* and duúnas *to arrest*, which historically may be related yet synchronically appear in different constructions with different meanings. These are presented in the following examples.

(xxii) a. cháSh oóTis ulo gaTílum
cháSh a-úTis ulo gaT'-ílum
thorn.y/ABS 1s-foot.y/ABS in pierce-3sy/PSTPRF
*The thorn had pierced my foot.*

b. jóTisho duúibaan
jóT-isho duún-c-baan
young-PLhx/ABS begin-NONPAST-3ph/PRES
*The young ones begin.*

These examples would best be analyzed as unergative monostratal clauses. However, duúnas *to begin* also occurs with subjects marked with ERG case when the thing begun is made explicit.

unclear which of these analyses (if any) is correct for clauses with duúnas and gaTáas. For the present, I assume that the subjects of these verbs are idiosyncratically marked with ERG case.[63]

To account for the agreement and case marking facts presented in this section, the rules presented at the end of the preceding section need no revision aside from an additional statement that Burushaski allows 2-3 retreat with a subset of verbs.

*5.2 Inversion*

Burushaski has a set of verbs similar to those described in Harris 1984:282 for Georgian and other languages, known as 'affective verbs' or 'psychological predicates'. These include yaqíin étas *to believe*, záp étas *to memorize*, leél étas *to know*, afsúus étas *to anguish*, rái étas *to want*, and qhaahísh étas *to wish*. The first three of these are shown in examples (94a-c).

(94) a. úe ité yaqíin ayécaan
ú-e ité yaqíin a-é-t-c-aan
3p-ERG DEM,3sy believe NEG-3sy-do-NONPAST-3ph/PRES
*They don't believe that.*

b. jáa Tók gitáap záp étam
jé-e Tók gitáap záp é-t-am
1s-ERG entire book,y/ABS memorize 3sy-do-1s/PAST
*I memorized the entire book.*

c. teélaTe muúyare leél écai
teélaTe mu-úyar-e leél é-t-c-ai
in.that.way 3sf-husband-ERG know 3sy-do-NONPAST-3sm/PRES
*In that way her husband will know.*

These sentences are straightforwardly analyzed as monostratal clauses with uninflectible verbs. These verbs can also occur in a different clause type.

(95) a. ité úa r yaaqín apí
ité ú-e r yaaqín a-b-í
DEM,3sy 3p-OBL to believe NEG-be-3sy/PRES
*They don't believe that.*

b. Tók gitáap jáa r záp bilúm
Tók gitáap jé-e r záp b-ilúm
entire book,y/ABS 1s-OBL to memorize be-3sy/PAST
*I memorized the entire book.*

---

[63] In order to clarify the analysis of clauses with barénas *to look*, gaTáas *to bite*, and duúnas *to arrest*, it would be helpful to see some unergative Burushaski verbs which allow 3s, similar to the English verb *to sing*. Then we could see how the subject of such a verb is marked.

I have not found any such verbs however. For example, the Burushaski counterpart to the English unergative sentence *I sing to her* is either *I sing it to her* with the inflectible verb éGaras *to sing/play* showing agreement with what is sung or played, or *I do a song to her* with the verbal noun Gár *song* plus the auxiliary étas *to do* showing agreement with Gár. This latter structure is the pattern for the Burushaski equivalents of many English unergative verbs.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| c. | ína | r | leél | apí | bésan | bilá | ké |
| | ín-e | r | leél | a-b-í | bésan | b-ilá | ké |
| | 3sh-OBL | to | know | NEG-be-3sy/PRES | what | be-3sy/PRES | COMP |

*He does not know what it is.*[64]

The sentences in (94) are superficially transitive. Those in (95) are superficially intransitive. The nominal which is sentence-initial and marked with ERG case in the examples in (94), is not sentence-initial and is followed by the postposition r *to* in the examples in (95). Also, the auxiliary étas *to do* in (94a-c) is replaced by b *to be* in (95a-c).[65]

In addition to the verbs just mentioned which can occur in both transitive and intransitive clauses, there is at least one other affective verb which can occur only in the second, intransitive clause type. This is the word for 'to need'.[66]

| (96) | jáa | r | ité | gitáap | awaáji | bilá |
|---|---|---|---|---|---|---|
| | jé-e | r | ité | gitáap | awaáji | b-ila |
| | 1s-OBL | to | DEMsy | book,y/ABS | need | be-3sy/PRES |

*I need that book.*

---

[64] Leél *to know* can be used in several clause types in Burushaski. In addition to the examples in (94c) and (95c), it can occur in the passive substitute form with manáas *to become* as in the following example:

| (xxiii) | leél | manáasa | r |
|---|---|---|---|
| | leél | man'-as-e | r |
| | know | become-INF-OBL | ? |

*When it became known...*

In this case the postposition r functions as a clause linking mechanism similar to the conjunctive participle -n and indicates that one action or state has been completed and another has begun, and both are interdependent. The difference between -n and -r is that -n signals same subject reference between the two clauses and -r signals switch reference.

Leél can also occur in an unaccusative construction where there is no direct object.

| (xiv) | ágar | leél | umánuman | ké | ósqaibaan |
|---|---|---|---|---|---|
| | ágar | leél | u-man'-uman | ké | ó-sqan-c-baan |
| | if | know | 3p-become-3ph/PAST | COMP | 3p-kill-NONPAST-3ph/FUT |

*If they know, they will kill them.*

Leél can also occur in an antipassive construction (see section 6.2).

[65] The auxiliary b *to be* is used for present and simple past tenses. The auxiliary manáas *to become* is used in cases where a non-present or non-past tense is required.

| (xxv) | síruf | qhudáaya | r | leél | meíbila |
|---|---|---|---|---|---|
| | síruf | qhudáa-e | r | leél | man'-c-bila |
| | only | God-OBL | to | know | become-NONPAST-3sy/FUT |

*Only God will know.*

The details of the tense distinctions involved with b and manáas are beyond the scope of this paper.

[66] It might be proposed that awaáji *to need* is an adjective in Burushaski meaning *necessary*. Awaáji does not act like Burushaski adjectives, however. It cannot modify nouns (éhem kées *important case* vs. *awaáji kées *necessary case*) and cannot be inflected for number (báarcuko gitáapiciN *red(s) books* vs. *awaáji- gitáapiciN [with no plural suffix allowed after awaáji]) as Burushaski adjectives generally can.

I suggest that the clauses in (95) and (96) be analyzed as inversion constructions. Informally, inversion is the name given to the construction in which a subject is demoted to indirect object (Harris 1984:279). In initially transitive clauses, the initial direct object advances to subject by unaccusative advancement. Inversion is a common feature of South Asian languages (Masica 1976:190) so it is not surprising to find it in Burushaski.

The inversion analysis of example (95b) is diagrammed in (97).

(97)

| | | |
|---|---|---|
| 2 | 1 | P |
| 2 | 3 | P |
| 1 | 3 | P |

| | | | |
|---|---|---|---|
| Tók gitáap | jáa r | záp | bilúm |
| entire book | to me | memorize | it is |

The cognizer (for (95b) heads a 3 arc and is followed by the postposition r.[67] Tók gitáap *the entire book* is a final 1 and determines subject agreement. It is also a 2, yet does not determine object agreement. In this case we could say that the verb b *to be* is defective in never allowing an agreement prefix of any sort. There is another possible analysis for this lack of agreement however, and this will be discussed in the next section.

*5.2.1. The interaction of inversion with 3-2 advancement*

The sentence in example (98) is somewhat similar to the inversion constructions that have been discussed in this section thus far.

(98)

| | | | | |
|---|---|---|---|---|
| óltalik | dishmíN | ulo | ína | r |
| ó-ltalik | dish-míN | ulo | ín-e | r |
| 3p-both | place,y-PL/ABS | in | 3sh-OBL | to |

| | |
|---|---|
| sawáabkuSh | déeGurshai. |
| sawáabkuSh | d-ée-Gurk-c-ai |
| reward,y/ABS | d-3sm-find-NONPAST-3sm/PRES |

*In both places he will find reward.*

The Experiencer is followed by the postposition r *to* and occurs before the Patient. The difference between example (98) and those in (95) and (96) above is that the d- prefix verb déeGurkas *to find* is used instead of the verb b *to be*. This verb also has an object agreement prefix that cross-references the Experiencer. If we posit inversion followed by 3-2 advancement and unaccusative advancement for déeGurkas, we can account for these facts. Sentence (98) is diagrammed below.

---

[67] When under emphasis, indirect objects may be followed by a simple coreferential stressed object agreement prefix which is in turn followed by the postposition r *to*. In some cases both forms are possible. In the sentences below both forms occur, although either form may be deleted.

(xxvi) a.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| tó | úna | r | góo | r | leél | bilá | | ké |
| tó | ún-e | r | gó-e | r | leél | b-ilá | | ké |
| so | 2s-OBL | to | 2s-OBL | to | know | be-3sy/PRES | | COMP |
| *So you know that...* | | | | | | | | |

b.

| | | | | | |
|---|---|---|---|---|---|
| khína | r | ée | r | barén | |
| khín-e | r | é-e | r | barén | |
| DEM3sh.prx-OBL | to | 3sm-OBL | to | look/IMP | |
| *Look at him!* | | | | | |

| (99) | Loc | 1 | 2 | P |
|---|---|---|---|---|
| | Loc | 3 | 2 | P |
| | Loc | 2 | Cho | P |
| | Loc | 1 | Cho | P |
| | óltalik dishmíN ulo | ína r | sawáabkuSh | déeGurshai |
| | in both places | to him | reward | he will find |

The pronoun in *he* is a final nuclear term. As a 1 it triggers subject agreement, and as a 2 it triggers object agreement. Since it heads a 3 arc, it is followed by the postposition r. SawáabkuSh, *reward* as a 2-chômeur is unmarked.[68]

*5.3. Antipassive*

A construction that is frequently discussed in the literature on languages with ergative morphology is antipassive. It is commonly understood to be a structure that has been 'detransitivized'. Postal (1977) made the claim based on French that antipassives are constructions in which an initial subject retreats to direct object, and then advances to subject again by unaccusative advancement in conformity to the final 1 law. The stratal chart for such a construction has the following form.

| (100) | 1 | 2 | P |
|---|---|---|---|
| | 2 | Cho | P |
| | 1 | Cho | P |
| | x | y | z |

Evidence from Choctaw was provided by Davies (1984a) to support this analysis. Burushaski also has an antipassive construction. It is governed by a small set of verbs and is obligatory in most, but not all cases.

The dozen or so verbs that govern antipassive in Burushaski repeatedly occur in clauses that have both transitive and intransitive characteristics. They are similar to unaccusative verbs in that their subjects, which occur sentence-initially, occur in ABS case and determine both subject and object agreement. They are similar to transitive verbs however, in that they require an ABS marked 'Patient' nominal to be present in the preverbal position that is typical for direct objects. Some examples are presented in (101).

(101) a. jé kámaṇ peesá dácanabaa
jé kámaṇ peesá d-á-can-abaa
1s/ABS some money,x/ABS d-1s-need-1s/PRES
*I need some money.*

b. óltalik dishmíN ulo ín
ó-ltalik dish-míN ulo ín
3p-both place,y-PL/ABS in 3sh/ABS

[68] The verb déeGurkas *to find* occurs in the type of clause described here with the experiencer followed by the postposition r *to*. It also occurs with the experiencer in ABS case with no postposition; a construction that I analyze in the next section as antipassive.

sawáabkuSh déeGurshai
sawáabkuSh d-ée-Gurk-c-ai
reward,y/ABS d-3sm-find-NONPAST-3sm/PRES
*In both places he will find reward.*[69]

c. jé ué tsum búT peesá ayáyam
jé ué tsum búT peesá a-yá-am
1s/ABS DEMhp from much money,x/ABS 1s-obtain-1s/PAST
*I obtained much money from them.*

d. jé qhabár dáyalam.
jé qhabár d-á-yal-am
1s/ABS news,y/ABS d-1s-hear-1s/PAST
*I heard the news.*

An antipassive analysis of the clauses in (101) accounts for all of the characteristics mentioned in the preceding paragraph. Example (101d) is diagrammed below.

(102)

| | | |
|---|---|---|
| 1 | 2 | P |
| 2 | Cho | P |
| 1 | Cho | P |

jé qhabár dáyalam
I news I heard

Jé *I* is a final nuclear term. As a 1 it triggers subject agreement. As a 2 it determines object agreement. It heads an ergative arc but also a 2 arc and so is not marked with ERG case. Qhabár *the news* is unmarked.

*5.3.1. The interaction of 2-3 retreat and antipassive*

The verb déwaranas *to want* occurs in clauses that are similar to antipassives.[70] Some examples of this verb are provided in (103).

(103) a. jé úne zamíina r dáwaranabaa.
jé ún-e zamíin-e r d-á-waran-abaa
1s/ABS 2s-OBL land,xs-OBL to d-1s-want-1s/PRSPRF
*I have wanted your land.*

b. jé Shapíka r dáwaranabaa.
jé Shapík-e r d-á-waran-abaa
1s/ABS food,y-OBL to d-1s-want-1s/PRSPRF
*I have wanted food.*

Clauses with déwaranas can only occur with their experiencers in ABS case and the 'object of desire' followed by the postposition r *to*. A simple antipassive analysis would be possible were it not for the presence of this postposition. This can be accounted for though, if we posit

[69] This example shows the antipassive option for the verb déeGurkas *to find* that was discussed in the previous section. DéeGurkas can alternatively occur in clauses with inversion followed by 3-2 advancement.

[70] Déwaranas means to want or need something enviously or covetously. Décanas and awaáji mean *to need* in general.

obligatory 2-3 retreat and antipassive for this verb. The diagram of (103a) would have the following form:[71]

| (104) | 1 | 2 | P |
|---|---|---|---|
| | 1 | 3 | P |
| | 2 | 3 | P |
| | 1 | 3 | P |
| | jé | úne zamíina r | dáwaranabaa |
| | I | to your land | I have wanted |

The pronoun jé *I* is the final subject and triggers subject agreement; it is a 2 and triggers object agreement. Un *you* heads a possessor arc and is marked with OBL case while zamíin *land* heads a 3 arc and is followed by the postposition r *to*.

**6. Multi-predicate constructions**

Thus far in this paper, I have referred to several elements which combine with uninflectible verbs, verbal nouns, predicate nominals and predicate adjectives to form predicates in Burushaski. These include the auxiliaries étas *to do* and manáas *to become* and the copula b *to be*. In this section I will discuss the forms of these auxiliaries and copula, some conditions on their usage, and their agreement properties.

The Relational Grammar account of these phenomena has traditionally been a clause union analysis where all of the dependents of an embedded clause become dependents of the matrix verb. A number of proposals and counterproposals have been advanced to characterize union constructions universally.

Recently, in Davies and Rosen (1988), it is argued that the constructions that have been analyzed as clause union are actually monoclausal multi-predicate clauses. Under this analysis, what was considered the embedded clause 'occupies the early strata' in the relational network and what was considered the union clause occupies the later strata. There are multiple 'P-sectors' in which different predicates bear the P relation. Predicates in lower (later) strata put predicates in higher (earlier) strata en chômage.

This multi-predicate analysis of clause union is the one that I adopt in this section on Burushaski auxiliaries, and in section 8 on causatives. I will discuss the syntax of the copula b *to be* first, followed by that of manáas *to become* and étas *to do*.

*6.1. The copula b* to be

The copula b *to be* occurs most often in predicate nominal and predicate adjective constructions. An example of each follows.

---

[71] Or, the diagram could appear this way:

| (xxvii) | 1 | 2 | P |
|---|---|---|---|
| | 2 | 3 | P |
| | 1 | 3 | P |
| | jé | úne zamíina r | dáwaranabaa |
| | I | to your land | I have wanted |

(105) jé hír báa
jé hír b-áa
1s/ABS man/ABS be-1s/PRES
*I am a man.*

(106) ín shwá bái
ín shwá b-ái
3sh/ABS good be-3sm/PRES
*He is good.*

These constructions are typically stative in nature and therefore one would perhaps assume an unaccusative analysis for them. However, unlike unaccusative verbs, b never allows an agreement prefix. There are at least two ways to account for this fact. First, we could simply state that the auxiliary b is indeed unaccusative, but is morphologically defective in that it never allows an agreement prefix. While this analysis describes the facts regarding object agreement with b *to be*, it provides no explanation for them.

Alternatively, we could assume that clauses with b *to be* are multi-predicate constructions in which the copula is the predicate in a final P-sector in which there is no 2 to trigger object agreement. Under this multi-predicate analysis, the Burushaski copula is an unergative verb (unergative verbs never allow agreement prefixes unless causativized - see section 8). While this goes against the general tendency in Burushaski (and cross-linguistically) that unergative verbs imply volition or action, it is not ruled out by any constraints in Relational Grammar. (105) in this analysis is displayed in table form in (107).[72]

(107)

| | | | |
|---|---|---|---|
| 2 | P | | (P-sector) |
| 1 | P | | |
| 1 | Cho | P | (P-sector) |
| jé | hír | báa | |
| I | man | I am | |

In (107) there are two P-sectors. The predicate of the initial P-sector is hír *man* which I propose is unaccusative. The initial stratum of the clause is the P-initial stratum for this predicate. Unaccusative advancement occurs in the initial P-sector and the second (unergative) stratum is the P-final stratum for hír. The third stratum is both the P-initial and P-final stratum for the predicate báa *I am*. Since this stratum is unergative, there is no agreement prefix on the copula.

The analysis of a predicate adjective construction is essentially the same. The diagram for (106) is presented in (108) below.

(108)

| | | | |
|---|---|---|---|
| 2 | P | | (P-sector) |
| 1 | P | | |
| 1 | Cho | P | (P-sector) |
| ín | shwá | bái | |
| he | good | he is | |

[72] Dotted lines are used in the tabular diagrams to separate P-sectors.

In this case the predicate in the initial P-sector is the unaccusative predicate adjective shwá *good*. 2-1 advancement occurs in the initial P-sector. Bái *he is* is an unergative predicate in the final P-sector and therefore shows no object agreement.

The multi-predicate analysis for clauses with b also helps to clarify our understanding of inversion constructions with this auxiliary.[73] Consider the following example once again (from section 5).

(109) Tók gitáap jáa r záp bilúm
Tók gitáap jé-e r záp b-ilúm
entire book,y/ABS 1s-OBL to memorize be-3sy/PAST
*I memorized the entire book.*

The verb agreement and case marking rules proposed in (84) and (85) at the end of section 4 are adequate to account for all of the facts of example (109) except for the lack of object agreement on the auxiliary b *to be*. As a nominal that is a final 1 and also heads a 2 arc, Tók gitáap *entire book* should trigger this agreement, yet it does not. However, under the multi-predicate analysis this lack of agreement is predicted. The diagram for this clause is presented below.

(110) 2 1 P (P-sector)
2 3 P
1 3 P
---
1 3 Cho P (P-sector)

Tók gitáap jáa r záp bilúm
entire book to me memorize it was

Záp *memorize* shows no agreement because it does not bear the P relation in the final P-sector. The auxiliary b shows no object agreement because there is no 2 in the final P-sector. Tók gitáap *entire book* is a final 1 and therefore b shows appropriate subject agreement.[74]

At least two grammatical relation changing constructions are seen to occur in the initial P-sector of a clause with the auxiliary b, inversion and unaccusative advancement. Both of these require 2-1 advancement, which occurs in the initial P-sector. In the multi-predicate analysis, the following statements need to be added to the verb agreement rules presented thus far:

(111) a. Verb agreement is determined by the GRs that nominals bear in the final P-sector of a clause.

b. Nouns, adjectives and uninflectible verbs cannot bear the P relation in the final P-sector.

c. Select the auxiliary b if and only if:
i. there is 2-1 advancement in the initial P-sector, and
ii. the clause is finally unergative.

---

[73] I will refer to the Burushaski copula as an auxiliary from now on.

[74] In section 5, footnote 56, an example was given of a sentence with inversion which used the uninflectible verb leél *to know* and the auxiliary manáas *to become* in the future tense with no object agreement prefix. I assume that the analysis for such a sentence is the same as that proposed in this section. Lack of object agreement on manáas in this case is because the *thing known* is an abstract entity which functions as a "y" class nominal; manáas never shows agreement with "y" class nominals.

*6.2 The auxiliary manáas* to become

The auxiliary manáas *to become* is frequently used with unaccusative and unergative verbs, as well as with predicate nominals and predicate adjectives. (112) is an example with an unaccusative verb, along with the appropriate diagram.

(112) a. ín dádar imánimi
ín dádar i-man'-imi
3sh/ABS tremble 3sm-become-3sm/PAST
*He trembled.*

b.
```
2   P
- - - - - - - -
2   Cho   P
1   Cho   P
═══════════════
ín  dádar  imánimi
he  tremble  he became
```

(112) contains the uninflectible unaccusative verb dádar *to tremble*. Unlike a clause with the auxiliary b *to be*, this clause has the unaccusative advancement construction in the final P-sector; manáas *to become* shows object agreement with the P-initial 2 of this P-sector, ín *he*. Some similar examples with a predicate adjective and a predicate nominal follow.

(113) a. ín sardáar imánimi
ín sardáar i-man'-imi
3sh/ABS president,h 3sm-become-3sm/PAST
*He became president.*

b.
```
2   P
- - - - - - - -
2   Cho   P
1   Cho   P
═══════════════
ín  sardáar  imánimi
he  president  he became
```

(114) a. ín shwá imánimi
ín shwá i-man'-imi
3sh/ABS good 3sm-become-3sm/PAST
*He became good.*

b.
```
2   P
- - - - - - - -
2   Cho   P
1   Cho   P
═══════════════
ín  shwá  imánimi
he  good  he became
```

Example (113) contains the predicate nominal sardáar *president*. Example (114) contains the predicate adjective shwá *good*. If these are analyzed as unaccusative predicates in these clauses, and unaccusative advancement in clauses with the auxiliary manáas *to become* must occur in the final P-sector, then the object agreement on this auxiliary is accounted for.

Finally I will present one more example of a clause with the auxiliary manáas.

(115) a. ín él um cás manímí
ín éle um cás man'-imi
3sh there from walk.out become-3sm/PAST
*He walked out from there (in disagreement).*

b. 1 Source P
---
1 Source Cho P
==========
ín él um cás manímí
he ' ' from there walk.out he became

(115) contains the uninflectible unergative verb chás *to walk out*. In this example there is no 2 in either P-sector and no object agreement. This is just what is predicted according to the verb agreement rules that have been presented thus far in this paper.

In order to guarantee that 2-1 advancement occurs in the final P-sector, the following statement must be added to the rules in (111).

(116) Select the auxiliary manáas if and only if:
i. any GR changing constructions, if they occur, occur in the final P-sector, and
ii. the clause is finally unergative.

We see the crucial difference between constructions with the auxiliaries manáas *to become* and b *to be*. In a clause with manáas, 2-1 advancement occurs optionally in the final P-sector; in a clause with b, 2-1 advancement occurs obligatorily in the initial P-sector. This assumes that the syntax of a multi-predicate clause with a noun, adjective or uninflectible verb for a predicate, along with an auxiliary, is partially determined by the auxiliary and partially by the initial P-sector predicate.

Manáas can also occur in an antipassive construction with the uninflectible verb leél *to know* as the following example shows.[75]

(117) bésan bilá ké leél gumáima
bésan b-ilá ké leél gu-man'-c-uma
what be-3sy/PRES COMP know 2s-become-NONPAST-2s/FUT
*You will know what it is.*

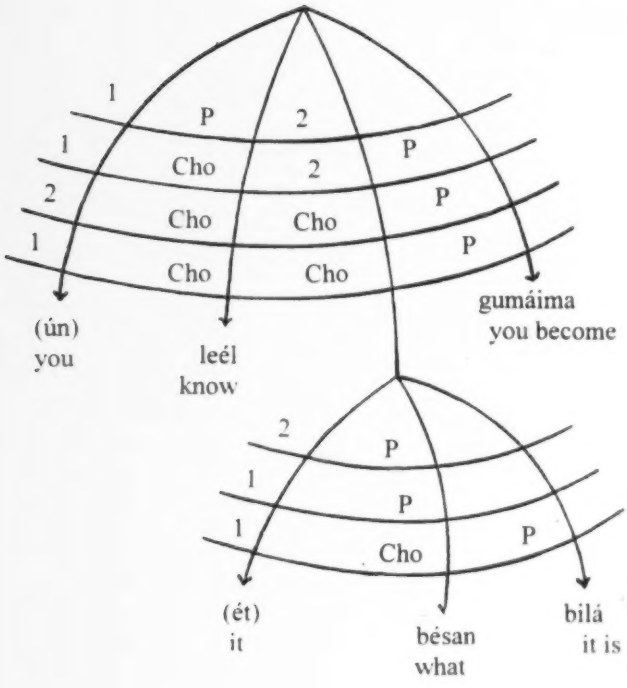
Example (117) is shown below in stratal diagram form.[76]

---

[75] Burushaski has an optional rule of unemphatic pronoun drop, under which subject and direct object pronouns need not appear overtly when their referents are clear from the context. The conditions on this rule and its details are not discussed in this paper. The pronouns ún *you* and ét *it* do not appear overtly due to this rule.

[76] In order to more clearly illustrate the relationships within and between the two clauses in this sentences I use a relational network diagram. This same sort of diagram will be useful in the next section on possessor ascension constructions.

(118)




This example shows the contrast between manáas (gumáima) and b (bilá). The antipassive construction occurs in the final P-sector of the main clause with manáas. Unaccusative advancement occurs in the initial P-sector of the subordinate clause with b.

*6.2.1. Passives with manáas*

We have seen in section 4 that in a passive construction with an uninflectible verb the auxiliary manáas *to become* is used.[77] Example (47b) from that section is repeated here.

| (119) | shishámuts | (ínmo | tsum) | táq | umánie |
|---|---|---|---|---|---|
| | shishá-muts | in-mo | tsum | táq | u-man'-ie |
| | window.x-PL/ABS | 3h-OBLf | by | smash | 3p-become-3px/PAST |
| | *The windows were smashed (by her).* | | | | |

At this time we can consider the syntax of this passive auxiliary. Under the multi-predicate analysis, the diagram for (119) has this form:

[77] As I mentioned in section 4, I do not know if only manáas *to become* can occur with passives, or if b *to be* can alternatively be used for certain tense or aspect distinctions.

(120)

| 2 | 1 | P | |
|---|---|---|---|
| 2 | 1 | Cho | P |
| 1 | Cho | Cho | P |
| shishámuts | ínmo tsum | táq | umánie |
| windows | by her | smash | they became |

In (120) shishámuts *windows* advances to 1 in a passive construction in the final P-sector. Since it is a final 1 and also heads a 2 arc, this nominal triggers both subject and object agreement on the auxiliary manáas.

*6.3. The auxiliary étas* to do

In section 4.2.1 an example was given with the uninflectible transitive verb táq *to smash*. This example is repeated as (121) below.

(121) a.

| íne | shishámuts | táq | ótumo |
|---|---|---|---|
| ín-e | shishá-muts | táq | o-t-umo |
| 3s-ERG | window,x-PL/ABS | smash | 3p-do-3sf/PAST |

*She smashed the windows.*

Except when passivized, clauses with táq always require the auxiliary étas *to do*. A multi-predicate analysis for these clauses is similar to that presented above for the other Burushaski auxiliaries. Under this analysis, example (121) is presented below.

(122)

| 1 | 2 | P | |
|---|---|---|---|
| 1 | 2 | Cho | P |
| íne | shishámuts | táq | ótumo |
| She | windows | smash | she did them |

Táq *to smash* cannot bear the P relation in the final P-sector and therefore cannot be inflected for subject or object agreement. The auxiliary verb étas *to do* does bear the P relation in the final P-sector and therefore shows object agreement and subject agreement as predicted. There are no clause types in Burushaski which employ the auxiliary étas in which GR changing constructions take place in either the initial or the final P-sector.

I will summarize what has been said in this section on Burushaski auxiliaries below.

(123) a. Verb agreement is determined by the GRs that nominals bear in the final P-sector of a clause.

b. Nouns, adjectives and uninflectible verbs cannot bear the P relation in the final P-sector.

c. Select the auxiliary b if and only if:
   i. there is 2-1 advancement in the initial P-sector, and
   ii. the clause is finally unergative.

d. Select the auxiliary manáas if and only if:
   i. any GR changing constructions, if they occur, occur in the final P-sector, and
   ii. the clause is finally unergative.

e. Select the auxiliary étas if and only if:
   i. there are no GR changing constructions in any P-sector, and
   ii. the clause is finally transitive.

**7. Possessor ascension**

When a certain class of transitive verbs in Burushaski have direct objects which are possessed, the possessor nominal determines object agreement as if it were a clausal constituent. This is illustrated below with the verb éskartsas *to cut*. Examples (124a,b) show straightforward singular and plural object agreement in the verb with the "x" class direct object húnn *log*.

(124) a. úe hún éskartsuman
ú-e hún é-skarts-uman
3p-ERG log,x/ABS 3sx-cut-3ph/PAST[78]
*They cut the log.*

b. úe hunánts óskartsuman
ú-e hun-ants ó-skarts-uman
3p-ERG log,x-PL/ABS 3px-cut-3ph/PAST
*They cut the logs.*

In (125) below, the direct object is the "x" class possessed nominal mómiSh *her finger*. Object agreement is not with this noun, but rather with the possessor of the direct object, gús *woman*.

(125) úe gúsmo mómiSh móoskartsuman
ú-e gús-mo mó-miSh mó-<L>-skarts-uman
3p-ERG woman-OBLf 3sf-finger,x/ABS 3sf-PA-cut-3ph/PAST
*They cut the woman's finger.*

Example (126) shows an ungrammatical attempt to have the verb agree with mómiSh *her finger*.

(126) *úe gúsmo mómiSh éskartsuman.
ú-e gús-mo mó-miSh é-skarts-uman
3p-ERG woman-OBLf 3sf-finger,x/ABS 3sx-cut-3ph/PAST
*(They cut the woman's finger.)*

In Relational Grammar this phenomenon can be analyzed as a case of possessor ascension, in which the possessor in a nominal bears both the POSS relation to the possessed nominal, and a grammatical relation to the clause.[79] Possessor ascension has been argued for in the Relational Grammar literature for a number of languages. These include Cebuano (Bell 1983:191ff),

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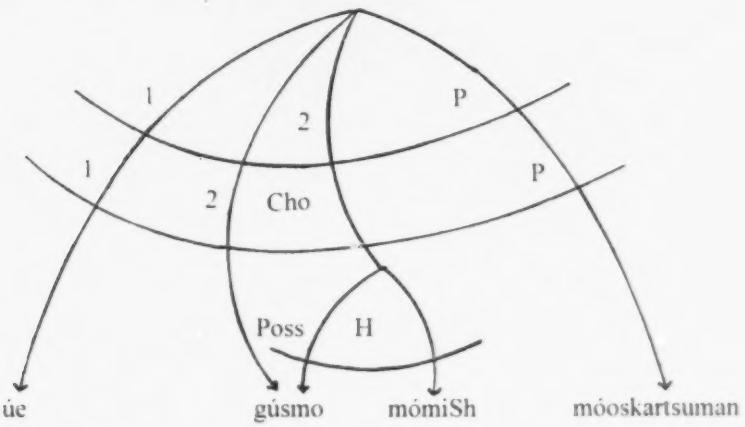
[78] The morphology of éskartsuman is actually more complex than this, but it doesn't pertain to the subject of possessor agreement.

[79] Possessor ascension is one type of a general category of syntactic constructions called ascensions in Relational Grammar. Another common type of ascension is 'raising' in which a nominal bearing a grammatical relation in a dependent clause also bears a grammatical relation in the main clause. Two laws of RG come into play in ascensions, .the Relational Succession Law and the Host Limitation Law (Perlmutter & Postal 1983b:53). The former requires that the ascended nominal assume the grammatical relation of the 'host' out of which it ascends. The latter requires that nominals can only ascend out of hosts bearing term grammatical relations. The host clause (or NP in the case of possessor ascension) is put en chômage as a result. Burushaski has no ascension constructions out of clauses as far as I know.

Choctaw (Davies 1984a:343-46, 1986:60), Kera (Camburn 1984) and Malagasy (Perlmutter and Postal 1983b:43-45) among others. The diagram for such an analysis of (125) above follows:

(127)




Gús *woman* is the possessor of the initial direct object mómiSh *her finger*, and in the second stratum ascends to assume the 2 relation, putting the initial possessed phrase en chômage. Since gús *woman* is a final nuclear term and heads a 2 arc, it triggers object agreement. MómiSh *her finger* is a 2-chômeur and does not trigger agreement.[80]

Note the long vowel form of the agreement prefix in (128b). When showing agreement with a possessor, the vowel in the object agreement prefix must be long.

(128) a.

| | | | |
|---|---|---|---|
| gúse | hilésho | curúk | ótumo |
| gús-e | hilés-isho | curúk | ó-t-umo |
| woman-ERG | boy-PL/ABS | cut | 3p-do-3sf/PAST |

*The woman cut the boys.*

b.

| | | | | |
|---|---|---|---|---|
| gúse | hiléshoe | ómiants | curúk | óotumo |
| gús-e | hilés-isho-e | ó-miSh-ants | curúk | ó-<L>-t-umo |
| woman-ERG | boy-PL-OBL | 3p-finger.x-PL/ABS | cut | 3p-PA-do-3sf/PAST |

*The woman cut the boys' fingers.*

Possessor ascension in a clause is signalled by an agreement prefix with a long vowel.[81] As (129) shows, in sentences with a non-overt initial direct object, vowel length in the agreement prefix is the superficial distinction between sentences with and without possessor ascension.

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[80] The final chômeur is the NP gúsmo mómiSh. For the sake of convenience I will refer to the NP by making reference to its head.

[81] Presence of a prefix with a long vowel does not necessarily signal possessor ascension however. It could signal a causative construction (see next section). Or it might simply be that the agreement prefix vowel in a particular verb requires the long form. One example of this type of verb is the antipassive verb déeGurkas *to find* (see section 5.3). Another is the verb éeGanas *to perceive* (also antipassive) as in the following example:

(129) a. jáa Cam góotam
jé-e Cam gó-<L>-t-am
1s-ERG poke 2s-PA-do-1s/PAST
*I poked your (something).*

b. jáa Cam gótam
jé-e Cam gó-t-am
1s-ERG poke 2s-do-1s/PAST
*I poked you.*

I suggest that the following rule needs to be incorporated into the grammar of Burushaski.

(130) In a possessor ascension construction, the object agreement prefix is lengthened.

One potential problem for the possessor ascension analysis is that in example (125) above and in the other examples of possessor ascension presented here, the possessor is still marked with OBL case. It cannot occur in ABS case. If the possessor is ascending to bear the 2 relation in the main clause, one might assume that it should be unmarked, since there is no rule that marks 2s with case. At least two alternative explanations are possible.

First, there may be no possessor ascension construction at all. Davies (1984b:399) argues against a possessor ascension analysis for similar clauses in Choctaw. In Choctaw, 2s determine verb agreement and same subject marking given the proper environment. Possessors of inalienably possessed body parts determine verb agreement, but not same subject marking. For this reason Davies rejects the possessor ascension analysis in favor of a rule which "asserts that a referential coding rule may optionally reference a possessor."

Since the only evidence for possessor ascension in Burushaski is verb agreement (and not ABS case marking), under a non-ascension analysis the object agreement rule could be revised as follows:

(131) A nominal heading a 2 arc, or the possessor of a nominal heading a 2 arc in a clause with a possessor agreement verb, determines object agreement.

Alternatively, a possessor ascension analysis could be maintained for these clauses if possessor nominals are considered to be case marked in a manner similar to 3s and Sources in Burushaski. Recall that case marking rule (85c) in section 4 states that nominals heading POSS arcs are marked with OBL case, in any level of the clause or phrase in which they occur (embedded or main). Thus OBL case marking for a possessor is the natural result of the rules presented above, whether it ascends to head a 2 arc or not. Nominals occur in ABS case only by default when no case marking rules are applicable. The same sort of phenomenon occurs with 3s and Sources. Nominals bearing those GRs are followed by the postpositions r *to* and tsum *from* respectively, no matter at what level in the clause they bear these relations.[82]

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(xxviii) hamíid qhósh étas mushkíl bilá áaGayabaa
hamíid qhósh é-t-as mushkíl b-ilá áa-Gan'-c-abaa
Hamid/ABS happy 3sy-do-INF difficult be-3sy/PRES 1s-perceive-NONPAST-1s/PRES
*I perceive (think that) to please Hamid is difficult.*

In neither of the examples referred to here would it be justified to posit a possessor ascension or causative construction to account for the long vowel in the agreement prefixes. (Note also that the long vowel form is not typical of antipassive constructions.)

[82] The exception to this is Sources in clauses with duGárusas *to ask*.

If the ascended nominal could passivize, undergo unaccusative advancement or 2-3 retreat, this would provide further evidence that would lend support to the possessor ascension analysis. Possessors may not participate in any of these constructions however. Lengthening of the vowel in the agreement prefix is not a strong argument for possessor ascension, since this could also be claimed as a result in a non-ascension analysis. However, since vowel lengthening is also present in a causative construction and an impersonal construction (see the following sections) a unified account of this phenomenon is possible with an ascension analysis. This will be discussed further in section 9.

*7.1. Conditions on possessor ascension*

Possessor ascension in Burushaski is a governed construction and is obligatory in clauses with verbs that govern it, no matter what kind of nominal is possessed. The examples in (125) and (128b) above show possessors of inalienably possessed body part nominals.[83] Possessors of other kinds of nominals also ascend.

(132) jáa úne pén GaJám góotam
jé-e ún-e pén GaJám gó-<L>-t-am
1s-ERG 2s-OBL pen,x/ABS snatch 2s-PA-do-1s/PAST
*I snatched your pen.*

Possessor ascension is limited to hosts that are 2s.[84] In (133) the possessor of an unaccusative subject ascends.

(133) jáa awáT dáaGaYila
jé-e awáT d-á-<L>-GaY-ila
1s-OBL skin,y/ABS d-1s-PA-itch-3sy/PRES
*My skin itches.*

Possessors of ergatives do not ascend.

(134) a. gúsmo muíe jáa ámiSh
gús-mo mu-í-e jé-e á-miSh
woman-OBLf 3sf-son-ERG 1s-OBL 1s-finger,x/ABS

áaskartsimi
á-<L>-skarts-imi
1s-PA-cut-3sm/PAST
*The woman's son cut my finger.*

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[83] The direct object in (125) is an inalienably possessed body part while those in (124a,b) are simple "x" nouns. The reason for this is not that the "x" noun hún *log* cannot host possessor ascension, but rather that I did not check possessor agreement for this noun. To check this it would be necessary to check a sentence like *He cut my logs.*

Not every verb authorizes possessor ascension. The following sentence is not acceptable.

(xxix) *jáa gúsmo mómiants móoyetsam
jé-e gús-mo mó-miSh-ants mó-<L>-yeéts-am
1s-ERG woman-OBLf 3sf-finger,x-PL/ABS 3sf-PA-see-1s/PAST
**I saw the woman's fingers.*

[84] Possessors of 2s which are advancees from 3 do not ascend in examples I have found. However, 3-2 advancement verbs may belong to the class of verbs that do not sanction possessor ascension at all. I lack the necessary data to explore this at this time.

b. *gúsmo muíe jáa ámiSh áakartsumo
áa-<L>-skarts-umo
1s-PA-cut-3sf/PAST

Possessor ascension only occurs when the subject and the possessor of the direct object are non-coreferential.[85] In (135a), agreement in the verbal prefix is with émients *his fingers*; there is no possessor ascension. As (135b) shows, possessor ascension can never have coreferential reading.

(135) a. qasaaíe émiants curúk ótimi
qasaaí-e é-miSh-ants curúk ó-t-imi
butcher-ERG 3sm-finger,x-PL cut 3px-do-3sm/PAST
*The butcher (i) cut his (i) fingers.*

b. qasaaíe émiants curúk éetimi
é-<L>-t-imi
3sm-PA-do-3sm/PAST
*The butcher (i) cut his (j) fingers.*
**The butcher (i) cut his (i) fingers.*

I summarize the conditions on possessor ascension in Burushaski in (136).[86]

(136) Conditions on possessor ascension

a. The subject and the possessor may not be co-referential.

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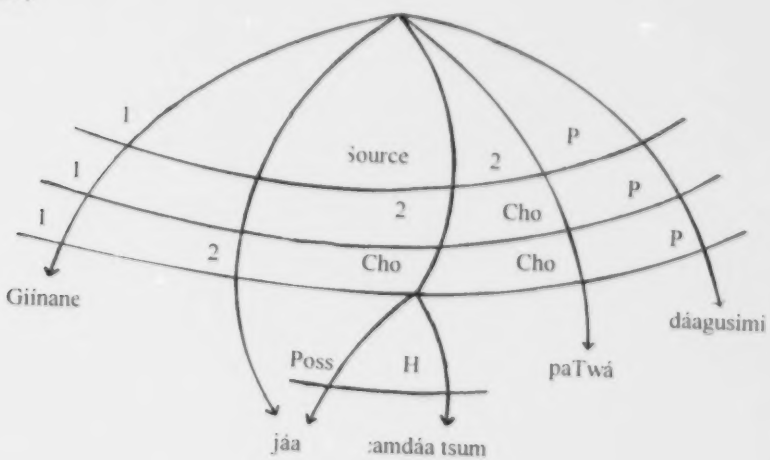
[85] There is a similar constraint in Sierra Popoluca (Marlett 1988:377).

[86] There is one verb which I have found where the agreement prefix cross references the possessor of a Source nominal. This is the verb déegusas *to remove*. An example is presented below.

(xxx) Giínane (jáa) camdá tsum paTwá dáagusimi
Giín-an-e jé-e camdá tsum paTwá d-áa-gus-imi
thief-INDEF-ERG 1s-OBL pocket/ABS from purse/ABS d-1s-remove-3sm/PAST
*A thief stole a purse from (my) pocket.*

Even if there is no overt possessive pronoun, the object agreement is still with the possessor. If no possessor is implied, the verb díusas *to extract* will be used. Assuming a Source-2 advancement analysis we could diagram example (xxx) in this way.

(xxxi)



b. The host must be a 2.

c. Possessor ascension is governed by a class of verbs, and is required by them when the other conditions are met.

**8. Causatives**

Burushaski is somewhat unusual for a South Asian language in that it uses prefixes to form causatives instead of suffixes (Masica 1976:106). Actually there are three causative prefixes used in Burushaski, one used with unaccusative verbs, one with unergative verbs and one with transitive verbs. I will discuss each of these in turn. In doing so, I will assume a monoclausal, multi-predicate analysis of Burushaski causatives similar to that used with Burushaski auxiliaries in section 6.

*8.1. Causatives of unaccusatives*

Only unaccusative verb roots occur with the causative prefix s-; unergative and transitive verbs do not.[87] In (137) below are listed some unaccusative verbs and their causative forms.

| (137) | Unaccusative | Causative | Gloss of root |
|---|---|---|---|
| a. | baláas | éspalas | *burn* |
| b. | duGánDeras | désqanDaras | *be crooked* |
| c. | díkaTas | déskaTas | *stop* |
| d. | dítalas | déstalas | *wake up* |
| e. | díwaras | désparas | *revive* |
| f. | diyáYas | déstaYas | *be propped up* |
| g. | Gasáas | ésqasas | *spoil* |
| h. | iGúlas | ésqulas | *burn* |
| i. | Gurtsáas | ésqurtsas | *be immersed* |
| j. | ikháranas | éskaranas | *be late* |
| k. | tháyas | éstayas | *be extinguished* |
| l. | iwáalas | éspalas | *be lost* |

Not every unaccusative verb can occur with s-. For example, there is no s- (nor any other) causative form for émalas *feel shame*.

Sentence examples with Guláas *to burn* are presented below.

(138) a. Gashíl Gulúmi
Gashíl Gul'-imi
wood,y/ABS burn-3sy/PAST
*The wood burned.*

b. jáa Gashíl ésqulam
jé-e Gashíl é-s-Gul'-am
1s-ERG wood,y/ABS 3sy-CAUS-burn-1s/PAST
*I made the wood burn.*

In (138a) there is no "y" class object agreement shown on the verb. This is typical of a certain class of verbs that was mentioned in section 2. In (138b) the agreement prefix is present;

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[87] There is at least one exception to this rule; the verb daGáyas *to hide*, which is unergative, has a causative form of éestaqayas *to make him hide*. Éestaqayas not only has the s- causative prefix, but also the lengthened vowel which is found in causative forms of transitive verbs (see section 8.3). There is no intermediary transitive form however, i.e. *éstaqayas.

the derived causative form is a member of the class of verbs which require an agreement prefix no matter what the class of the object.

A monoclausal multi-predicate analysis for (138b) is given below:

(139)

| | 2 | | P |
|---|---|---|---|
| 1 | 2 | P | Cho |
| jáa | Gashíl | s | Gul'- |
| I | wood | (cause | (burn) |

Gashíl *wood* heads a 2 arc in both the initial and final P-sector and determines object agreement. Jé *I* heads a final 1 arc in the final P-sector and determines subject agreement. Another example is presented below. (140) contains the unaccusative verb díwaras *to revive*.

(140) ín díwarai
ín d-i-war-ai
3sh/ABS d-3sm-revive-3sm/PRSPRF
*He has revived.*

Example (141a) is the causative form of this sentence with the appropriate tabular diagram following.

(141) a. jáa ín désparabayam
jé-e ín d-e-s-war-abayam
1s-ERG 3sh/ABS d-3sm-CAUS-revive-1s/PRSPRF
*I have caused him to revive. (I have revived him.)*

b.

| | 2 | | P |
|---|---|---|---|
| 1 | 2 | P | Cho |
| jáa | ín | s | war- |
| I | he | (cause | (revive) |

No causative (including causatives of unaccusatives) interacts with any other GR changing constructions, i.e. inversion or antipassive.

*8.2. Causatives of unergatives*

For unergative verbs, causative and non-causative forms are identical. I have indicated this in the examples below with a null prefix Ø- *CAUS* in the causative forms. Two unergative verbs and their causative counterparts are presented in (142) and (143).

(142) a. gús mán aTe hurúTumo.
gús mán aTe hurúT-umo
woman/ABS platform,x/ABS on sit-3sf/PAST
*The woman sat on the platform.*

b. jáa gús mán aTe móuruTam
jé-e gús mán aTe mó-Ø-hurúT-am
1s-ERG woman/ABS platform,x on 3sf-CAUS-sit-1s/PAST
*I made the woman sit on the platform.*

(143) a. biTán tamasháan ulo giráshai
biTán tamashá-an ulo girát-c-ai
shaman/ABS celebration,y-INDEF/ABS in dance-NONPAST-3sm/PRES
*The shaman dances in a celebration.*

b. úe biTán tamasháan ulo
ú-e biTán tamashá-an ulo
3p-ERG shaman/ABS celebration,y-INDEF/ABS in

egirashaan
é-Ø-girat-c-aan
3sm-CAUS-dance-NONPAST-3ph/PRES
*They make the shaman dance in a celebration.*

(142a) and (143a) are simple unergative constructions. In (142b), jé *I* is subject. In (143b), the subject is ú *they*. In both cases the subject of the 'inner' clause is the direct object of the main clause. (142b) is diagrammed below.

(144)

| | 1 | Loc | P | |
|---|---|---|---|---|
| 1 | 2 | Loc | Cho | P |
| jáa | gús | mán aTe | hurúT | Ø- |
| I | woman | on platform | (sit) | (cause) |

The 1 in the initial P-sector is a 2 in the final P-sector and triggers object agreement.

*8.3. Causatives of transitives*

The causative predicate for a transitive verb is realized as lengthening of the object agreement prefix vowel.[88] Consider the sentences in (145).

(145) a. úe húnan dítsuman
ú-e hún-an d-í-ts-uman
3ph-ERG beam,x-INDEF/ABS d-3sx-bring-3ph/PAST
*They brought a beam.*

b. jáa ú húnan dóotsam
jé-e ú hún-an d-ó-<L>-ts-am
1s-ERG 3ph/ABS beam,x-INDEF/ABS d-3ph-CAUS-bring-1s/PAST
*I made them bring a beam.*

Example (145a) is straightforwardly analyzed as a monostratal transitive clause. In the causative construction in (145b) however, jé *I* is subject. The subject of the 'inner' clause is the direct object of the main clause and thus determines object agreement on the verb.

According to the multi-predicate analysis, (145b) is diagrammed as follows:

[88] Many unaccusative verbs which can be causativized with the s- prefix produce derived transitive constructions which can in turn be causativized by the long vowel agreement prefix; for example, iGúlas *burn*, ésqulas *make burn*, éesqulas *make him burn (it)*.

(146)

| | | 1 | 2 | P |
|---|---|---|---|---|
| | | | | |
| 1 | 2 | Cho | Cho | P |
| jáa | ú | húnan | ts- | <L> |
| I | them | beam | (bring | (cause) |

Transitive verbs which have no agreement prefix because their direct objects are always "y" class nominals are causativized by the addition of an agreement prefix which cross-references the final 2 and which has a long vowel. For example, the causative of daldínas *to sift* is éedaldinas *to cause him to sift*.

(147) a. íne sáu daldínimi
in-e sáu daldín-imi
3sh-ERG sand,yp/ABS sift-3sm/PAST
*He sifted the sand.*

b. jáa ín sáu éedaldinam
jé-e ín sáu é-<L>-daldín-am
1s-ERG 3sh/ABS sand,yp/ABS 3sm-CAUS-sift-1s/PAST
*I made him sift the sand.*

*8.4. Causatives of the auxiliary étas*

Clauses with an uninflectible verb and the auxiliary étas *to do* also can occur in causative constructions. Consider the sentences in (148):

(148) a. gúse méezisho safáa ótumo
gús-e méez-isho safáa ó-t-umo
woman-ERG table,x-PL/ABS clean 3px-do-3sf/PAST
*The woman cleaned the tables.*

b. jáa gús méezisho safáa móotam
jé-e gús méez-isho safáa mó-<L>-t-am
1s-ERG woman/ABS table,x-PL/ABS clean 3sf-CAUS-do-1s/PAST
*I made the woman clean the tables.*

Example (148a) is a multi-predicate clause with the uninflectible verb safáa *to clean*. Example (148b) is a causative construction. The diagram for example (148b) follows:

(149)

| | | 1 | 2 | P | |
|---|---|---|---|---|---|
| | | | | | |
| | | 1 | 2 | Cho | P |
| | | | | | |
| 1 | 2 | Cho | Cho | Cho | P |
| jáa | gús | méezisho | safáa | t- | <L> |
| I | woman | tables | clean | (do) | (cause) |

Jé *I* is the final 1 in the final P-sector, is marked with ERG case and triggers subject agreement. Gús *woman* is the final 2 in the final P-sector, is marked with ABS case and triggers object agreement. The uninflectible verb safáa *to clean* does not head a P arc in the final P-sector and shows no object agreement. The auxiliary verb étas *to do* has a long vowel in the agreement prefix which signals causative.

As with s- causatives of unaccusatives, causatives of unergatives and transitives do not interact with any other GR changing constructions; in other words, clauses with a causative disallow any GR changing constructions in any P-sector.

I summarize the conditions on Burushaski causatives below:

(150) a. Causatives disallow any GR changing constructions in any P-sector.

b. The P-final 1 in the last non-causative P-sector is a P-final 2 in the causative P-sector.

c. Select s- if the clause is initially unaccusative.

d. Select O- if the clause is initially unergative.

e. Select <L> if the clause is initially transitive.

f. Uninflectible verbs may not be causativized.

*8.5. Some atypical causatives*

Causative verb forms may not always have 'non-causative' counterparts. There is a group of verbs that can only occur in syntactically causative constructions yet have no independently occurring non-causative forms. Some of these verbs are éeltiras *to show*, éesiras *to feed* and éeras *to send*. They are not related to any non-causative Burushaski verbs for seeing, eating or going/traveling. Examples are presented in (151) below with some tentative glosses.

(151) a. hiléseasínaswíirmóoltirimi
hilés-easínaswíirmó-<L>-ltir-imi
boy-ERGgirl/ABSpicture,y/ABS3sf-CAUS-view?-3sm/PAST
*The boy showed the girl the picture.*

b. ímiemuíphíTiéesirumo
í-mi-emu-íphíTié-<L>-sir-umo
3sm-mother-ERG3sf-son/ABSbread,x/ABS3sm-CAUS-ingest?-3sf/PAST
*The (lit. 'his') mother fed her son bread.*

c. jáaúngíiltargóoram
jé-eúngíilt-erg ó-<L>-r-am
1s-ERG2s/ABSGilgit-OBL to2s-CAUS-go?-1s/PAST
*I sent you to Gilgit.*

(151a) is presented below in diagram form.

(152)

| 1 | 2 | Cho | Cho | P |
|---|---|---|---|---|
| hilése | dasín | taswíir | ltir- | <L> |
| boy | girl | picture | (view?) | (cause) |

If this sentence is analyzed as a causative construction, the ABS case marking on dasín *girl* and taswíir *picture* is accounted for. Dasín is a final 2 and taswíir is a 2 chômeur in the final P-sector, both of which are unmarked according to the case marking rules being proposed in this paper. As a nominal heading a final 2 arc, dasín triggers object agreement. The long vowel signals a causative. Hilés *boy* is a final ergative and triggers subject agreement.

The alternative to a causative analysis for the sentences in (151a-c) is to posit verbs which are somewhat unusual morphologically (with respect to the long vowels). But other facts are less easily accounted for. For example, if we claim that dasín *girl* in (151a) is an initial 3 that advances to 2, we fail to account for the lack of the postposition r following it.[89]

**9. Impersonal constructions**

There is a set of uninflectible verbs that are used for some bodily processes in Burushaski. They are always used with the auxiliary éetas *to do* (with a long vowel in the agreement prefix). A sample set of these verbs is given in (153).

(153) 'Bodily process' verbs

| | | |
|---|---|---|
| a. | thíShâu | *to sneeze* |
| b. | muruúq | *to have pain in the stomach* |
| c. | qhiír | *to breathe noisily (due to a lung disease)* |
| d. | Cár | *to have diarrhea* |
| e. | qár | *to itch* |
| f. | óq | *to vomit* |
| g. | Cám | *to have pain in the side and chest* |

Example (154) is a sentence example with the first of these verbs.

(154)

| | | |
|---|---|---|
| ín | thíShâu | móocila. |
| ín | thíShâu | mó-<L>-t-c-ila |
| 3sh/ABS | sneeze | 3sf-D-do-NONPAST-3sy/PRES |

*She is sneezing.*

The nominal representing the person sneezing occurs in ABS case and triggers object agreement on the auxiliary éetas *to do*. The object agreement prefix vowel is long. The subject agreement suffix is showing agreement with a "y" class singular nominal. ThíShâu *to sneeze* is not this nominal since it is not marked with ERG case.

I suggest that these verbs occur in impersonal constructions, with a (silent) dummy subject that is grammatically a "y" class singular pronoun.

Within Relational Grammar, the notion of 'dummy nominal' has been important in the account of many diverse grammatical phenomena. The examples below are from Perlmutter and Postal 1983c:101, which provides a clear description of the place of dummy nominals in RG.

(155) a. It is clear that he is guilty. (English)

b. Il est évident qu'il est coupable. (French)
*It is obvious that he is guilty.*

c. Es is nicht sicher, dass er schuldig ist. (German)
*It is not certain that he is guilty.*

---

[89] In certain limited circumstances the Viewer must be marked with -r. For example:

(xxxii)

| | | | | |
|---|---|---|---|---|
| jáa | r | hán | gánan | áaltir! |
| je-e | r | han | gan-an | a-<L>-ltir-0 |
| 1s-OBL | to | one,xy | road,y-INDEF | 1s-CAUS-view?-IMP |

*Show me a (new) way (to go).*

d. Yr oedd hi yn bwrw glaw ddoe. (Welsh)
was she throw rain yesterday
*It was raining yesterday.*

e. Het is niet zeker, dat hij te laat kwam. (Dutch)
It is not certain that he too late came
*It is not certain that he came late.*

In an impersonal analysis, the diagram for (154) would be:

(156)

| | | | |
|---|---|---|---|
| | 2 | P | |
| | 2 | Cho | P |
| 1 | 2 | Cho | P |
| Dummy | in | ThíShâu | t- |
| | she | sneeze | (do) |

The pronoun ín *she* is a final 2 and triggers object agreement in the auxiliary étas *to do*. As a "y" class pronominal 1, the dummy triggers subject agreement. In this case, the vowel lengthening indicates presence of this silent dummy.[90]

*9.1. Agreement prefix vowel lengthening revisited.*

We have seen that the lengthened form of the object agreement prefix occurs in three cases: possessor ascension, causatives of transitives, and clauses with dummies. A rule for object agreement prefix vowel lengthening could be proposed as follows:

(157) Lengthen the vowel of the object agreement prefix if the clause contains a constituent which heads a final arc in the clause but not an initial arc.

---

Perhaps the presence of -r is triggered by the imperative form of this sentence. In these cases I would propose a 2-3 retreat analysis as diagrammed in (xxxiii) below:

(xxxiii)

| | | | | |
|---|---|---|---|---|
| | 1 | 2 | P | |
| 1 | 2 | Cho | Cho | P |
| 1 | 3 | Cho | Cho | P |
| Unspecified | jáar | hán gánan | ltir- | <L> |
| | to me | a road | (view?) | (cause) |

[90] This analysis violates the active dummy law however, which states informally that a dummy must put some nominal en chômage in the stratum in which it first bears a GR in a clause (Perlmutter 1983b).

Alternatively, one might argue for a Dummy + Causative analysis of (154). In this case the diagram for this example would have the following form:

(xxxiv)

| | | | | |
|---|---|---|---|---|
| | 2 | P | | |
| | 2 | Cho | P | |
| 1 | 2 | Cho | Cho | P |
| Dummy | ín | ThíShâu | t- | <L> |
| | she | sneeze | (do) | CAUS |

Lit. It causes her to do a sneeze.

This rule must be applied disjunctively, after rules (150c,d) in section 8 which mark causatives of intransitives and unergatives. Lengthening then is the default way to mark the presence of 'latecomers' in a clause.[91] The possibility of giving a unified treatment to vowel lengthening provides further evidence in favor of each of the analyses presented earlier.[92]

*9.2. Disjunctively ordered rules*

In Davies 1983 evidence is provided for the disjunctive application of morphosyntactic rules. We have already seen in the last section how the idea of disjunction is useful in stating the rules for forming Burushaski causatives. Disjunctive ordering could also be applied to the set of case marking rules presented in this paper. In that case the rules would have the following form:

(158) Case marking rules (an alternative version)

a. A nominal which heads a POSS arc is marked with OBL case.

b. A nominal which heads a 3 arc is flagged with the postposition r.

c. A nominal which heads a Benefactive arc is flagged with the postposition gáne.

d. A nominal which is an absolutive or heads a 2 chômeur arc occurs in ABS case (that is, is unmarked).

e. A nominal which heads a Source arc or a 1 chômeur arc is flagged by the postposition tsum.

f. A nominal which is an ergative is marked by ERG case.

No mention is made of specific levels at which nominals bear these relations, nor are there restrictions on what other GRs a nominal might bear in a clause. Certain of these rules are crucially ordered with respect to each other. These ordered pairs are presented below, along with the syntactic constructions which require these orderings:

---

[91] I am indebted to Albert Bickford for this analysis.

[92] There is one small class of verbs with lengthened prefixes which do not fit any of the categories described so far. Two of these verbs are déematalas *yawn* and déepirkinas *stumble*. These verbs are similar to unaccusative verbs in that they show agreement in both the prefix and suffix with the experiencer, yet the agreement prefix is definitely long, not short:

(xxxiv) a. jé dáamatalam
je d-a-<L>-matal-am
1s/ABS d-1s-?-yawn-1s/PAST
*I yawned.*

b. hir déepirkanimi.
hir d-e-<L>-pirkan-imi
man.m/ABS d-3sm-?-stumble-3sm/PAST
*The man stumbled.*

It is unclear to me how to analyze clauses with these verbs.

(159) Ordered pairs of case marking rules

a. (158a), (158d) - Possessor ascension
b. (158b), (158c) - Benefactive-3 advancement
c. (158b), (158d) - 3-2 advancement, 2-3 retreat
d. (158b), (158f) - Inversion
e. (158d), (158e) - Source-2 advancement
f. (158d), (158f) - Antipassive
g. (158e), (158f) - Passive

In this analysis, unmarked case cannot be the default marking. The rule for ABS case must apply before at least two other case marking rules, that which marks Sources and 2 chômeurs, and that which marks ergatives.

**10. Conclusion**

In this paper I have examined a number of commonly used clausal constructions in Burushaski. By employing a grammatical framework which makes use of grammatical relations at different strata in a clause, a wide range of agreement and case marking phenomena have been accounted for. I have shown that Burushaski has many of the same grammatical constructions found in widely diverse languages, such as passive, 3-2 advancement, 2-3 retreat, and others.

The RG notions of unaccusative and unergative are sufficient to characterize the two major groupings of intransitive verbs in Burushaski. Unaccusative verbs are distinct from unergative verbs in that they require an object agreement prefix and allow causativization with s-.

The variety of nominals that can trigger object agreement on the verb are accounted for by various revaluation constructions. By saying that Burushaski sanctions passive, 3-2 advancement, Source-2 advancement, 2-3 retreat, and others under varying conditions, we are able to state the generalization for object agreement in a very succinct way; verbs agree with final nuclear terms, and 2s trigger object agreement.

A similar statement can be made for subject agreement once it is stated that the grammar sanctions inversion, multi-predicate causative constructions, and impersonal constructions with a silent dummy nominal. Positing silent dummies provides an explanation for why certain bodily process verbs consistently have third person "y" class subject agreement prefixes and a long vowel in the object agreement prefix.

Burushaski particularly lends support for the RG claim that antipassive constructions are characterized as those in which a nominal is demoted from 1 to 2, and advances to 1 again by unaccusative advancement. The antipassive analysis accounts for the various transitive and intransitive characteristics that clauses with antipassive verbs have, especially object agreement in the verb with the notional subject.

The RG notion of ascension is sufficient to account for possessor object agreement with verbs that govern this construction. The possessor of a direct object ascends to bear the 2 relation in the main clause and therefore triggers the appropriate agreement in the verb.

Analyzing clauses with auxiliaries as multi-predicate constructions helps to account for the absence of object agreement on b *to be*, its presence with étas *to do*, and its presence or absence with manáas *to become*. The auxiliary b requires that grammatical relation changing constructions occur in the initial P-sector; manáas requires that GR changing constructions occur in the final P-sector; and étas prohibits any GR changing constructions in any P-sector.

Causatives and inversion are also seen as multi-predicate constructions in Burushaski. Under this analysis, lack of object agreement in inversion constructions is a consequence of the

requirement of the auxiliary b that GR changes occur in the 'inner' clause. Vowel length in the object agreement prefix is a result of causative in clauses with verbs that sanction this construction.

Case marking of certain nominals in Burushaski is often sensitive to grammatical relations that they bear in a clause, without reference to levels. This is true for indirect objects, Possessors and Sources (with the exception of one verb). Thus if a nominal bears one of these relations in a clause it will receive the appropriate marking, no matter what other grammatical relations it bears.

The rule for ergative case marking is similar. In order for a nominal to receive ERG marking it must be an ergative and head only a 1 arc. It need not be finally ergative; a claim which is supported by the analysis of clauses with 2-3 retreat constructions. Thus the nominals that are final subjects in inversion, antipassive and passive clauses are not marked with ERG case because they also bear the 2 relation at some level in these clauses.

In this analysis, any nominals that are not case marked by a specific rule receive no overt marking (ABS case) by default. Alternatively, the case marking rules can be generalized further when they are applied disjunctively. In this case however, a specific rule for ABS (unmarked) case marking is required.

**Appendix: Summary of rules**

*Verb agreement rules*

a. The verb agrees with final nuclear terms.

b. A final nuclear term which heads a 1 arc (in any stratum) determines subject agreement.

c. A final nuclear term which heads a 2 arc (in any stratum) determines object agreement.

d. Nouns of the 'seeds' class do not determine object agreement on the auxiliary manáas.

e. Verb agreement is determined by the GRs that nominals bear in the final P-sector of a clause.

f. The u- prefix registers passive on inflectible verbs and blocks object agreement.

*Case marking rules*

a. A nominal which heads a 3 arc is flagged with the postposition r.

b. A nominal which heads a Source arc (and which is not the final 2 of duGárusas) or a 1-chômeur arc is flagged with the postposition tsum.

c. A nominal which heads a POSS arc is marked with OBL case.

d. A nominal which heads a final Benefactive arc is flagged with the postposition gáne.

e. A nominal which is an ergative and heads only a 1 arc in a non-future tense clause is marked by ERG case.

*Case marking rules (disjunctively ordered)*

a. A nominal which heads a POSS arc is marked with OBL case.

b. A nominal which heads a 3 arc is flagged with the postposition r.

c. A nominal which heads a Benefactive arc is flagged with the postposition gáne.

d. A nominal which is an absolutive or heads a 2 chômeur arc occurs in ABS case (that is, is unmarked).

e. A nominal which heads a Source arc or a 1 chômeur arc is flagged by the postposition tsum.

f. A nominal which is an ergative in a non-future tense clause is marked by ERG case.

*Auxiliary selection rules*

a. Nouns, adjectives and uninflectable verbs cannot bear the P relation in the final P-sector.

b. Select the auxiliary b if and only if:
   i. there is 2-1 advancement in the initial P-sector, and
   ii. the clause is finally unergative.

c. Select the auxiliary manáas if and only if:
   i. any GR changing constructions, if they occur, occur in the final P-sector, and
   ii. the clause is finally unergative.

d. Select the auxiliary étas if and only if:
   i. there are no GR changing constructions in any P-sector, and
   ii. the clause is finally transitive.

*Conditions concerning possessor ascension*

a. The subject and the possessor may not be co-referential.

b. The host must be a 2.

c. Possessor ascension is governed by a class of verbs, and is required by them when the other conditions are met.

*Rules concerning causatives*

a. Causatives disallow any GR changing constructions in any P-sector.

b. The P-final 1 in the last non-causative P-sector is a P-final 2 in the causative P-sector.

c. Uninflectable verbs may not be causativized.

d. Select s- if the clause is initially unaccusative.

e. Select Ø- if the clause is initially unergative.

f. Lengthen the vowel of the object agreement prefix if the clause contains a constituent which heads a final arc in the clause but not an initial arc. In other words, select <L> if the clause
   i. is causative and initially transitive, or
   ii. contains a possessor ascension construction, or
   iii. contains a dummy.

g. Rules d-f are disjunctively ordered.

**Abbreviations**

| | |
|---|---|
| ABS | absolutive |
| CAUS | causative |
| Cho | Chômeur |
| COMP | complementizer |
| d. "d-" | prefix |
| D | Dummy |
| DEM | demonstrative pronoun |
| ERG | ergative |
| f | feminine |
| FUT | future |
| h | human |
| IMP | imperative |
| IMPF | imperfect |
| INDEF | indefinite |
| INF | infinitive |
| <L> | lengthening |
| Loc | locative |
| m | masculine |
| Mal | Malefactive |
| NEG | negative |
| OBL | oblique (non-feminine form) |
| OBLf | oblique (feminine form) |
| p | plural |
| PA | possessor ascension |
| PASS | passive |
| PAST | past |
| PL | plural |
| prx | proximate |
| PSTPRF | past perfect |
| POSS | possessor |
| PRES | present |
| PRSPRF | present perfect |
| QUEST | question |
| REFL | reflexive |
| REL | relative pronoun |
| s | singular |
| STATPRT | stative participle |
| Tem | Temporal |
| x | "x" noun class |
| y | "y" noun class |
| 1,2,3 | in glosses: first, second, third person; in diagrams: subject, direct object, indirect object |

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